Occupational Wages in the East North Central Census Division, 1997

Summary 00-1

This report provides estimates of occupational pay from the 1997 National Compensation Survey (NCS) in the East North Central census division. It highlights average (mean) hourly pay for workers in six areas:

- Private industry and State and local government
- Metropolitan and nonmetropolitan area
- Selected occupations and major occupational groups
- Full- and part-time wages
- Bargaining status
- Size of establishment

Wages in the East North Central (ENC) census division averaged \$15.45 per hour during 1997. Workers in private industry in the ENC region averaged \$14.85 per hour, whereas hourly pay of workers in State and local government averaged \$18.51. Nationwide, pay of all workers covered by the survey averaged \$15.09 an hour.

NCS summary reports are published for each of the nine census regions: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. Data also are published for some individual localities. These summary reports are a new product of the National Compensation Survey and may be useful to NCS data users in localities where separate NCS studies are not published.

Table 1 in this summary provides an overview of average pay data for worker and establishment characteristics and geographic area by private industry and State and local government. For example, white-collar workers in private industry averaged \$18.28 per hour; blue-collar workers averaged \$13.28, and service workers averaged \$7.63. Corresponding averages in State and local government were \$21.26, \$14.46, and \$13.40. Generally, average hourly earnings for private industry workers were lower than for State and local government workers. Part of this difference can be explained by differences in the occupational and industrial mix of the two sectors. In State and local government, for example, professional specialty and technical occupations are proportionately more prevalent than in private industry. With the exception of the construction industry, few State and local government workers are in goods-producing industries.

Full-time workers in the ENC region averaged \$16.20 per

hour whereas part-time workers averaged \$8.65. In private industry, full-time workers averaged \$15.62 an hour, and part-time workers averaged \$8.28. For workers in State and local government, average hourly pay was \$19.02 and \$11.55, respectively, for full- and part-time workers. NCS classifies employees as full or part time based on the employer's classification.

Workers in large establishments in the East North Central region, that is, establishments with 2,500 or more employees, earned \$20.13 per hour. Workers in the smallest establishment-size category studied (50-99) averaged \$12.45.

Table 2 shows that workers in metropolitan areas averaged \$15.90 per hour, more than the average pay for workers in nonmetropolitan areas, \$12.98. Table 2 also shows that, most of the time, regardless of employee or establishment characteristics, pay tends to be higher in metropolitan areas than in nonmetropolitan areas. (See the Technical Note for definitions of metropolitan and nonmetropolitan areas.)

Among the nine census divisions, average earnings were generally highest in the New England, Middle Atlantic, and Pacific regions. Average earnings for all census divisions, and for other characteristics, can be seen in tables 1 and 2.

Full-time, part-time, and combined average pay rates for occupations in private industry and in State and local governments are shown in tables 3, 4, and 5. These tables contain wage rates and mean weekly hours for individual occupations and for major occupational groups. Following are examples of average hourly earnings for combined full- and part-time workers within the occupational groups of white collar, blue collar, and services. All registered nurses averaged \$19.00 per hour (table 3). Registered nurses in private industry averaged \$18.98 (table 4), whereas those in State and local government averaged \$9.80 in private industry and \$10.46 in State and local government. Janitors and cleaners, a service occupation, averaged \$9.02 in private industry and \$10.80 in State and local government.

Average pay for full-time workers is generally higher than pay for workers on a part-time schedule. Sometimes, average pay for part-time work is higher than for full-time work, mainly among workers in the health care field. For example, among all industries, full-time physicians averaged \$41.30 an hour while part-time physicians averaged \$67.82.

Earnings by occupational group and level are shown in table 6. Usually, the levels tend to show higher pay at higher work levels. The Bureau uses a generic leveling technique with 10 criteria to assign a level to an occupation. The Technical Note has more information on generic leveling and generic leveling criteria. Table A in the Technical Note shows the number of establishments studied in the ENC census

division by employment size; most companies were in the 100-499 worker size class. It also shows the number of establishments represented. Table B in the Technical Note shows the number of workers represented by the surveys in the ENC census division by major occupational groups such as professional specialty and technical, sales, and transportation and material moving.

Table 1. Summary, East North Central: Mean hourly earnings1 and weekly hours by selected characteristics, private industry and State and local government, National Compensation Survey, 2 1997

		Total		Priv	ate industry	′	State and	l local gover	nment
Worker and establishment characteristics,	Hourly e	arnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error ³ (percent)	Mean weekly hours	Mean	Relative error ³ (percent)	Mean weekly hours	Mean	Relative error ³ (percent)	Mean weekly hours
Total	\$15.45	0.9	36.2	\$14.85	1.0	36.3	\$18.51	1.3	35.8
Worker characteristics: ⁴									
White-collar occupations ⁵ Professional specialty and technical Executive, administrative, and	18.92 22.99	1.1 1.0	36.4 35.8	18.28 21.66	1.4 1.4	36.5 36.2	21.26 25.66	1.2 1.4	35.7 35.0
managerial	26.88 14.15 11.48 13.35 17.20	1.1 6.0 1.0 1.1 1.2	39.9 31.9 36.7 38.3 39.9	27.33 14.16 11.45 13.28 17.28	1.3 6.0 1.2 1.3	40.3 31.9 36.8 38.4 39.9	24.47 12.58 11.61 14.46 16.39	1.8 9.9 1.6 1.3 1.8	37.9 28.6 36.3 36.4 39.4
Machine operators, assemblers, and inspectors	12.25 14.06	1.9	39.8 36.4	12.25 14.12	1.9 2.0	39.8 37.2	11.90 13.70	7.8 2.2	39.5 32.0
helpers, and laborers Service occupations ⁵	10.40 9.26	2.0 1.3	34.7 31.3	10.27 7.63	2.2 1.2	34.5 29.8	12.25 13.40	3.3 2.4	37.8 35.6
Full time	16.20 8.65	.9 1.4	39.6 20.4	15.62 8.28	1.1 1.9	39.8 20.7	19.02 11.55	1.4 2.8	38.5 18.3
Union Nonunion	16.70 14.94	1.0 1.3	37.5 35.7	15.29 14.72	1.3 1.3	37.9 35.8	19.50 17.06	1.3 3.0	36.9 34.3
TimeIncentive	15.37 17.17	.8 5.4	36.1 38.1	14.71 17.17	.9 5.4	36.2 38.1	18.51 –	1.3 -	35.8 -
Establishment characteristics:									
Goods producing	(⁶)	(⁶)	(⁶)	16.04 13.91	1.3 1.8	39.8 33.9	(⁶)	(⁶)	(⁶)
50-99 workers ⁷ 100-499 workers 500-999 workers 1000-2499 workers 2500 workers or more	12.45 14.03 15.95 17.22 20.13	2.1 1.6 2.5 2.9 1.0	34.7 36.2 36.5 36.1 37.6	12.31 13.52 15.22 16.83 20.75	2.2 1.9 3.0 3.3 3.7	34.6 36.4 36.9 36.5 37.7	14.83 18.25 18.55 19.01 19.04	9.5 2.5 2.3 3.3 1.8	36.0 34.6 35.5 34.3 37.5
Geographic areas:8									
Metropolitan Nonmetropolitan	15.90 12.98	1.0 1.3	36.2 36.4	15.31 12.10	1.1 1.2	36.2 36.5	19.10 16.20	1.0 4.2	35.7 36.0
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain	16.96 17.42 15.45 14.44 13.73 11.88 13.82 14.04	1.8 1.5 .9 1.8 1.4 2.3 1.0	35.1 35.7 36.2 36.3 37.0 37.8 37.2 36.5	16.29 16.47 14.85 13.70 13.20 11.34 13.45 12.97	2.1 1.7 1.0 2.2 1.8 2.5 1.2 2.6	35.0 35.8 36.3 36.2 36.7 38.0 37.0 36.4	20.14 21.25 18.51 17.24 15.47 15.22 14.96 17.42	2.1 1.5 1.3 .8 1.4 1.7 1.3	35.2 35.5 35.8 36.8 37.9 36.9 37.8 36.5
Pacific	16.88	1.5	36.2	15.89	1.8	36.4	20.23	1.7	35.5

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by

are at least partially based on productivity payments such as piece rates, commissions, and production bonuses.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria.

the number of workers, weighted by hours.

In this census division, collection was conducted between October 1996 and

May 1998. The average reference period was August 1997.

3 The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a

sample estimate. For more information about RSEs, see Technical Note.

⁴ Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Union workers are those whose wages are determined through collective bargaining. Wages of time workers are based solely on hourly rate or salary; incentive workers are those whose wages

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See Technical Note for more information.
 Classification of establishments into goods-producing and service-producing industries applies to private industry only.

 Establishments classified with 50-99 workers may contain establishments with forest that 60 details.

with fewer than 50 due to staff reductions between survey sampling and collection.

8 Data are presented for metropolitan and nonmetropolitan area divisions as well as 9 census area divisions. See Technical Note for a list of survey areas in each census area division and the States comprising the 9 census area divisions.

Table 2. Summary, East North Central: Mean hourly earnings¹ and weekly hours by selected characteristics, metropolitan and nonmetropolitan areas,² National Compensation Survey,³ 1997

		Total		Metro	opolitan are	as	Nonme	etropolitan a	reas
Worker and establishment characteristics,	Hourly e	arnings		Hourly ea	arnings		Hourly e	arnings	
and geographic areas	Mean	Relative error ⁴ (percent)	Mean weekly hours	Mean	Relative error ⁴ (percent)	Mean weekly hours	Mean	Relative error ⁴ (percent)	Mean weekly hours
Total	\$15.45	0.9	36.2	\$15.90	1.0	36.2	\$12.98	1.3	36.4
Private Industry	14.85	1.0	36.3	15.31	1.1	36.2	12.10	1.2	36.5
State and local government	18.51	1.3	35.8	19.10	1.0	35.7	16.20	4.2	36.0
Worker characteristics:5									
White-collar occupations ⁶	18.92	1.1	36.4	19.26	1.2	36.4	16.28	2.6	35.7
Professional specialty and technical	22.99	1.0	35.8	23.14	1.1	35.8	22.03	3.5	35.5
Executive, administrative, and	22.00	1.0	00.0	20.11		00.0	22.00	0.0	00.0
managerial	26.88	1.1	39.9	27.53	1.2	40.0	19.77	5.7	39.0
Sales	14.15	6.0	31.9	14.67	6.2	32.5	8.42	5.2	26.7
Administrative support	11.48	1.0	36.7	11.68	1.2	36.6	10.10	1.9	37.4
Blue-collar occupations ⁶	13.35	1.1	38.3	13.70	1.3	38.1	11.93	1.1	38.9
Precision production, craft, and repair	17.20	1.2	39.9	17.69	1.2	39.9	14.56	2.3	40.0
Machine operators, assemblers, and	17.20		00.0	17.00	'	00.0	1 1.00	2.0	10.0
inspectors	12.25	1.9	39.8	12.62	2.1	39.8	11.13	2.4	39.6
Transportation and material moving	14.06	1.8	36.4	14.41	2.0	36.1	12.25	1.4	37.5
Handlers, equipment cleaners,	14.00	1.0	30.4	14.41	2.0	30.1	12.25	1.4	37.5
helpers, and laborers	10.40	2.0	34.7	10.23	2.4	34.4	11.21	2.3	36.4
Service occupations ⁶	9.26	1.3	31.3	9.38	1.4	31.2	8.71	3.8	31.6
Service occupations	3.20	1.5	31.3	9.50	1.4	31.2	0.71	3.0	31.0
Full time	16.20	.9	39.6	16.72	1.0	39.6	13.39	1.5	39.5
Part time	8.65	1.4	20.4	8.66	1.5	20.5	8.56	3.0	19.9
	0.00			0.00		20.0	0.00		
Union	16.70	1.0	37.5	16.92	1.0	37.4	15.60	2.9	38.1
Nonunion	14.94	1.3	35.7	15.49	1.4	35.7	11.78	2.0	35.7
T.	45.07		00.4	45.00		00.4	40.04	4.0	00.4
Time	15.37	.8	36.1	15.80	.9 5.4	36.1	13.04	1.3	36.4
Incentive	17.17	5.4	38.1	17.73	5.4	38.2	10.40	14.4	36.8
Establishment characteristics:									
Goods producing ⁷	16.04	1.3	39.8	16.94	1.0	39.8	12.76	2.2	39.9
Service producing ⁷	13.91	1.8	33.9	14.21	2.0	34.2	10.85	2.6	31.4
50-99 workers ⁸	12.45	2.1	34.7	12.88	2.3	34.7	10.40	2.3	34.6
100-499 workers	14.03	1.6	36.2	14.48	1.9	36.3	12.20	1.2	36.0
500-999 workers	15.95	2.5	36.5	16.08	2.5	36.4	15.39	7.5	37.4
1000-2499 workers	17.22	2.9	36.1	17.37	1.8	35.5	10.00	7.5	07.4
2500 workers or more	20.13	1.0	37.6	20.13	1.0	37.6	_	_	_
Geographic areas:9									
New England	16.96	1.8	35.1	17.42	1.8	35.2	13.75	5.3	34.0
Middle Atlantic	17.42	1.5	35.7	17.42	1.3	35.7	12.22	7.4	36.1
East North Central	15.45	.9	36.2	15.90	1.0	36.2	12.22	1.3	36.4
West North Central	14.44	1.8	36.3	15.40	2.2	36.3	11.82	3.7	36.2
South Atlantic	13.73	1.4	37.0	14.17	1.7	36.9	11.56	4.0	37.4
East South Central	11.88	2.3	37.8	13.60	1.6	37.0	10.22	3.7	38.7
West South Central	13.82	1.0	37.0	14.13	1.0	37.0	11.88	4.0	37.3
Mountain	14.04	1.0	36.5	14.17	2.4	36.4	13.51	2.4	36.6
Pacific	16.88	1.5	36.2	17.06	1.5	36.2	13.37	2.4	36.1
i dollo	10.00	'.5	00.2	17.00	'.5	00.2	15.57	2.3	55.1

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

whose wages are determined through collective bargaining. Wages of time workers are based solely on hourly rate or salary; incentive workers are those whose wages are at least partially based on productivity payments such as piece rates, commissions, and production bonuses.

6 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. See Technical Note for more information.

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industries applies to private industry only.

8 Establishments classified with 50-99 workers may contain establishments with fewer than 50 workers due to reduction in staff from the time of sampling to data collection.

9 See Technical Note for a list of survey areas in each census area division and the States comprising the 9 census area divisions.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria.

the number of workers, weighted by hours.

Metropolitan areas can be a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area as defined by the Office of Management and Budget, 1994. Nonmetropolitan areas are counties that do not fit the definitions above. For more information, see Technical Note.

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In this census division, collection was conducted between October 1996 and May 1998. The average reference period was August 1997.

The relative standard error (RSE) is the standard error expressed as a

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⁵ Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Union workers are those

 $\label{eq:table 3. Selected occupations, East North Central: Mean hourly earnings 1 and weekly hours for full-time and part-time workers, 2 National Compensation Survey, 3 1997}$

		Total			Full time		ı	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
AII	\$15.45	0.9	36.2	\$16.20	0.9	39.6	\$8.65	1.4	20.4
All excluding sales	15.52	.8	36.5	16.17	.8	39.5	8.97	1.6	20.4
White collar	18.92	1.1	36.4	19.68	1.1	39.4	11.16	2.6	20.5
White collar excluding sales	19.49	1.0	37.0	19.95	1.0	39.3	13.26	2.8	20.5
Professional specialty and technical	22.99	1.0	35.8	23.38	1.1	38.7	18.29	3.0	18.7
Professional specialty	24.61	1.1	35.7	25.01	1.2	38.5	19.67	3.3	18.6
Engineers, architects, and surveyors	27.10	1.5	40.3	27.10	1.5	40.4	_	-	_
Architects	23.24	6.3	39.7	23.30	6.3	40.0	_	-	_
Metallurgical and materials engineers	29.67	4.5	40.0	29.67	4.5	40.0	_	-	_
Civil engineers	23.86	4.0	39.4	23.86	4.0	39.4	_	-	_
Electrical and electronic engineers	27.85	4.3	40.3	27.85	4.3	40.3	_	-	_
Industrial engineers	24.01	2.6	40.5	24.02	2.6	40.5	_	-	_
Mechanical engineers	26.13	4.4	40.6	26.10	4.4	40.7	_	-	-
Engineers, n.e.c.	28.05	2.0	40.2	28.07	2.0	40.3	-		-
Mathematical and computer scientists	27.55	3.1	39.7	27.57	3.1	39.8	23.78	9.5	25.4
Computer systems analysts and scientists	26.96	2.5	39.8	26.97	2.6	40.0	25.38	8.4	27.9
Operations and systems researchers and	00.45		00.4	00.04	7.0	000			
analysts	29.15	7.7	39.4	29.21	7.6	39.6	_	-	_
Actuaries	31.43	11.3	38.3	31.43	11.3	38.3	_	-	_
Natural scientists	23.33	8.0	38.9	23.42	8.3	40.2	_	-	_
Chemists, except biochemists	28.95	6.5	40.3	28.95	6.5	40.3	_	-	_
Physical scientists, n.e.c.	22.94	8.4	39.2	23.08	8.5	40.0	_	-	_
Agricultural and food scientists	23.81	9.2	40.0	23.81	9.2	40.0	_	-	_
Medical scientists	14.95	12.2	37.6	14.72	12.4	39.2	_ 24.50	-	20.2
Health related	21.51	1.4	32.9	21.49	1.8	39.6	21.59	3.8	20.2
Physicians	44.10 19.00	10.9	37.5	41.30	11.2	43.2 39.2	67.82	6.5	17.6
Registered nurses	26.92	1.4 2.7	32.1 31.4	18.96 26.25	1.7 2.2	40.0	19.12 29.52	1.4 8.5	20.7
Pharmacists Dietitians	16.74	2.7	36.7	16.55	3.2	40.0	18.69	4.4	17.2
Respiratory therapists	16.07	1.4	31.7	16.13	1.8	39.3	15.86	2.6	18.1
Occupational therapists	23.76	4.8	32.7	24.58	4.2	39.6	20.06	12.6	18.4
Physical therapists	24.47	5.4	34.8	23.97	5.9	39.8	27.93	8.7	18.7
Speech therapists	24.47	5.2	33.4	25.20	6.4	38.5	22.70	4.5	20.6
;	15.44	4.7	36.7	15.64	5.1	38.7	13.07	2.9	22.5
Therapists, n.e.cPhysicians' assistants	24.44	15.8	30.7	13.64	3.1	30.7	13.07	2.9	22.5
Teachers, college and university	32.76	3.4	33.8	33.50	3.5	38.4	23.32	5.9	13.3
Biological science teachers	32.70	8.8	35.7	33.76	7.6	38.2	25.52	3.9	15.5
Chemistry teachers	32.54	7.2	29.4	34.55	5.4	35.7	_	_	_
Psychology teachers	32.50	14.9	39.8	32.50	14.9	39.8	_	_	_
History teachers	27.00	12.7	43.7	27.00	12.7	43.7	_	_	_
Social science teachers, n.e.c.	30.73	9.4	39.3	30.73	9.4	39.3	_	_	_
Engineering teachers	47.31	18.8	39.7	47.32	18.8	40.0	_	_	_
Mathematical science teachers	37.50	2.3	34.6	38.27	2.2	39.9	18.56	9.6	8.0
Computer science teachers	38.33	3.8	32.0	_		-	-	-	-
Medical science teachers	39.33	24.7	44.4	38.47	25.2	44.9	_	_	_
Health specialities teachers	32.33	8.7	39.6	32.50	8.9	42.1	24.92	7.5	10.7
Business, commerce, and marketing teachers	35.24	13.7	22.4	37.40	12.8	35.0	22.70	19.9	7.2
Art, drama, and music teachers	28.81	9.0	34.5	28.81	10.1	39.8	28.82	6.4	15.9
Physical education teachers	25.91	8.1	32.1	26.07	8.5	34.4	_	_	_
Education teachers	35.13	8.1	37.3	35.14	8.0	37.8	_	_	_
English teachers	32.05	9.4	37.3	32.19	9.4	38.6	_	_	-
Foreign language teachers	28.21	13.5	33.6	28.98	14.3	41.0	_	_	-
Theology teachers	28.61	13.9	39.5	28.61	13.9	39.5	_	-	-
Trade and industrial teachers	27.93	16.1	19.0	_	-	-	_	-	-
Teachers, post secondary, subject not specified	29.44	9.7	24.7	31.65	8.9	39.1	22.32	11.1	11.3
Teachers, post secondary, n.e.c.	28.41	6.0	27.4	29.87	7.0	33.9	22.15	3.0	15.1
Teachers, except college and university	26.71	1.6	33.6	27.47	1.7	36.0	14.71	6.7	16.2
Prekindergarten and kindergarten	18.33	9.1	33.1	20.09	8.6	36.7	9.33	23.9	22.0
Elementary school teachers	28.29	2.1	35.1	28.44	2.1	35.7	22.76	12.0	20.5
Secondary school teachers	28.94	2.8	36.1	29.03	2.8	36.5	21.35	14.2	18.0
Teachers, special education	26.70	4.2	36.2	26.89	4.2	36.3	_	<u> </u>	
Teachers, n.e.c.	27.75	4.8	29.0	29.25	4.8	35.2	15.87	9.3	12.0
Substitute teachers	10.02	7.2	18.6	_	_	-	10.11	4.8	14.6

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time			Part time	
,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
/hite collar –Continued									
Professional specialty and technical –Continued									
Professional specialty –Continued Teachers, except college and university									
Continued Vocational and educational counselors	\$20.10	8.0	36.9	\$20.47	8.5	38.7	\$15.23	1.3	22
Librarians, archivists, and curators	19.51	7.0	34.6	19.72	7.5	38.7	16.97	9.2	14
Librarians	20.30	7.1	35.6	20.51	7.6	38.9	17.49	9.5	1
Archivists and curators	14.84	11.4	29.6	14.88	12.3	37.3	_	_	
Social scientists and urban planners	21.45	7.5	37.7	21.44	7.7	39.3	21.83	15.2	1:
Economists	20.27	5.3	39.4	20.20	5.5	40.0	_	-	.
Psychologists	25.42	8.8	37.0	25.55	9.0	38.6	-	-	
Urban planners	19.28	2.4	39.9	19.28	2.4	39.9			_
Social, recreation, and religious workers	14.91	2.6	37.8	15.02	2.6	38.9	11.72	8.6	2
Social workers	15.11	2.6	37.9 36.0	15.15	2.7	38.8 38.9	13.36	6.2	1
Recreation workers Clergy	10.77 15.69	11.6 15.0	38.3	11.46 16.54	11.0 14.2	40.9	_	-	
Religious workers, n.e.c.	17.71	10.7	37.4	-	-		_	1 =	
Lawyers and judges	37.29	13.8	38.0	37.80	14.1	39.8	25.66	8.0	1
Lawyers	37.94	14.0	38.3	38.48	14.3	39.8	25.22	8.8	2
Writers, authors, entertainers, athletes, and									
professionals, n.e.c.	20.45	4.8	38.4	20.65	5.0	39.6	12.86	7.1	1
Technical writers	19.12	5.0	38.6	19.51	4.9	39.8	_	-	
Designers	21.42	7.6	39.7	21.42	7.6	39.7	_	-	
Actors and directors	17.97	20.0	40.0	17.97	20.0	40.0	_	_	
Painters, sculptors, craft artists, and artist	12.45	8.3	39.5	13.45	8.3	39.5			
printmakersPhotographers	13.45 16.16	7.4	39.5	16.26	7.5	39.5	_	-	
Artists, performers, and related workers, n.e.c.	12.91	8.8	24.3	-	7.5	39.0	_	_	
Editors and reporters	18.18	9.0	40.1	18.18	9.0	40.2	_	_	
Public relations specialists	22.03	10.3	39.5	22.18	10.3	39.7	_	-	
Athletes	25.34	16.0	33.8	26.63	13.3	39.9	7.65	11.3	1
Professional, n.e.c.	21.16	7.0	38.8	21.27	7.2	40.0	17.16	9.3	18
Technical	17.28	2.0	36.1	17.58	2.1	39.3	13.81	3.5	19
Clinical laboratory technologists and technicians	14.56	2.9	34.5	14.66	3.5	39.6	14.02	6.2	2
Health record technologists and technicians	11.77	5.1	34.4	11.59	5.8	39.5	12.98	10.3	1
Radiological technicians	16.01	3.4	30.8	16.16	4.1	39.5	15.60	5.9	1
Licensed practical nurses Health technologists and technicians, n.e.c	12.43 12.71	2.2 2.7	34.0 31.9	12.23 13.10	2.4 3.0	39.3 39.8	13.51 10.90	2.6 4.5	1
Electrical and electronic technicians	18.74	2.7	39.1	18.91	2.4	40.2	10.90	4.5	'
Industrial engineering technicians	14.32	8.8	40.0	14.32	8.8	40.0	_	_	
Mechanical engineering technicians	19.58	5.0	40.7	19.58	5.0	40.7	_	-	
Engineering technicians, n.e.c.	20.26	3.4	39.4	20.34	3.3	39.6	_	-	
Drafters	17.46	4.4	39.9	17.49	4.4	40.0	_	-	
Surveying and mapping technicians	15.60	9.8	38.7	15.60	9.8	38.7	_	-	
Biological technicians	17.44	19.5	40.0	17.44	19.5	40.0	_	-	
Chemical technicians	16.03 17.22	4.0 5.6	39.1 33.5	16.09 16.07	4.1 3.9	39.8 39.9	_	_	
Airplane pilots and navigators	71.12	29.1	25.3	71.12	29.1	25.3	_	_	
Broadcast equipment operators	11.23	13.0	37.7	11.59	13.9	40.0	_	_	
Computer programmers	21.07	2.2	39.2	20.96	2.1	39.5	_	-	
Legal assistants	19.55	6.1	38.3	19.68	6.1	39.3	_	-	.
Technical and related, n.e.c.	17.64	6.5	39.4	17.67	6.5	39.6	12.38	4.3	20
Executive, administrative, and managerial	26.88	1.1	39.9	26.92	1.2	40.3	20.92	9.0	17
Executives, administrators, and managers	30.75	1.5	40.2	30.80	1.6	40.7	23.07	15.4	1
LegislatorsAdministrators and officials, public	23.18	33.2	5.5	_	_	-	23.27	36.6	5
administration	25.67	3.9	38.7	25.73	3.7	39.7	_	_	.
Financial managers	29.98	3.5	40.1	30.04	3.5	40.2	_	_	.
Personnel and labor relations managers	32.62	4.1	41.8	32.62	4.1	41.8	-	-	-
Purchasing managers	30.78	5.7	40.0	30.78	5.7	40.0	_	_	-

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total		ı	Full time		F	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
White collar –Continued									
Executive, administrative, and managerial									
-Continued Executives, administrators, and managers									
Continued Managers, marketing, advertising, and public									
relations	\$35.94	4.4	41.2	\$35.96	4.4	41.2	-	_	-
Administrators, education and related fields	31.08	3.8	39.7	31.09	3.8	40.0	\$29.79	21.7	22.
Managers, food sorvicing and lodging	27.76	3.0	39.7	27.73	3.0	40.0	_	-	-
Managers, food servicing and lodging establishments	15.69	5.7	45.0	15.66	5.7	45.3	_	_	l _
Managers, service organizations, n.e.c.	19.07	7.6	39.5	19.22	7.7	40.8	_	_	_
Managers and administrators, n.e.c	33.35	2.3	40.8	33.36	2.4	40.8	_	_	-
Management related	21.53	1.1	39.5	21.55	1.1	39.7	18.60	5.6	25
Accountants and auditors	18.09	8.0	39.8	18.09	8.0	39.9	_	-	-
Underwriters	26.54	20.6	38.6	26.54	20.6	38.6	-	-	-
Other financial officers	22.03	4.0	39.6	22.03	4.0	39.8	_	-	-
Management analysts Personnel, training, and labor relations	22.43	4.8	39.0	22.31	4.8	39.3	-	-	-
specialists	21.00	3.3	39.2	21.07	3.3	39.8	16.43	6.6	21
products	19.84	8.9	40.8	19.85	8.9	41.4	_	-	
Purchasing agents and buyers, n.e.c	23.18	3.8	39.8	23.29	3.8	39.8	_	-	
Construction inspectorsInspectors and compliance officers, except	19.05	6.2	39.4	19.09	6.3	39.6	-	_	
construction	17.17 24.57	3.0 2.0	39.5 39.2	17.17 24.62	3.0 2.1	39.5 39.4	20.24	6.8	29
Sales	14.15	6.0	31.9	16.84	6.4	40.1	6.60	1.2	20
Supervisors, sales	17.68	4.8	39.6	17.89	4.8	40.4	_	-	-
Insurance sales	21.15	18.8	32.7	22.91	16.6	38.0	-	-	-
Real estate sales	26.44	17.6	38.2	26.44	17.6	38.2	_	-	-
Securities and financial services sales	37.95	11.7	40.4	37.95	11.7	40.4	-	-	'
Advertising and related sales	16.79	15.3 30.6	37.8	17.26 27.47	16.4 30.6	39.7 40.0	_	_	'
Sales, other business services	27.05 30.76	15.8	39.3 41.3	30.76	15.8	41.3	_	-	
Sales representatives, mining, manufacturing,	00.70	10.0	11.0	00.70	10.0	11.0			
and wholesale	26.06	7.3	41.0	26.06	7.3	41.0	_	_	-
Sales workers, motor vehicles and boats	16.63	8.1	43.2	16.63	8.1	43.2	_	_	
Sales workers, apparel	6.58	5.2	27.2	7.40	9.4	38.8	5.88	2.0	2
Sales workers, furniture and home furnishings	11.43	9.7	33.7	12.62	7.0	40.3	8.53	5.3	24
Sales workers, radio, tv, hi-fi, and appliances	12.11	17.7	36.3	13.00	16.5	40.4	-	_	
Sales workers, hardware and building supplies	8.91	10.0	35.4	9.37	9.9	39.8	_	_	
Sales workers, parts Sales workers, other commodities	14.08 9.14	6.4 5.6	40.0 29.1	14.22 10.79	6.4	40.5 39.6	6.83	1.5	2
Sales counter clerks	9.14 8.01	7.2	27.3	9.40	4.0	40.6	6.08	6.3	18
Cashiers	7.04	1.9	25.3	7.82	3.9	38.6	6.46	1.4	20
Demonstrators, promoters, and models, sales	9.26	9.1	19.5	-	-	-	6.86	6.3	14
Sales support, n.e.c.	11.54	5.5	38.9	11.79	5.5	40.0	7.59	6.2	26
Administrative support, including clerical	11.48	1.0	36.7	11.78	1.0	39.3	8.62	2.2	22
Supervisors, general office	15.41	3.3	39.7	15.47	3.4	39.7	-	-	-
Supervisors, computer equipment operators	20.35	10.9	39.8	20.35	10.9	39.8	_	-	-
Supervisors, financial records processing Chief communications operators Supervisors, distribution, scheduling, and	17.82 13.66	6.9 9.2	39.6 40.0	17.82 13.66	6.9 9.2	39.6 40.0	-	_	:
adjusting clerks	16.51	5.0	40.4	16.53	5.1	40.5	_	_	.
Computer operators	13.78	4.9	39.6	13.78	4.9	39.7	_	-	-
Secretaries	12.48	1.5	37.7	12.56	1.5	39.2	11.14	6.8	23
Stenographers	12.11	4.1	33.6	12.82	4.3	38.2	9.97	3.4	24
Typists	11.14	3.5	36.5	11.59	3.8	39.1	8.55	4.0	26
Interviewers	9.76	2.6	32.9	10.21	1.3	39.8	8.22	4.9	20
Hotel clerks	7.93	2.7	33.4	8.39	4.0	39.6	-	-	-

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		1	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
White collar –Continued									
Administrative support, including clerical									
-Continued		l .			1				
Transportation ticket and reservation agents	\$12.78	8.4	34.3	\$13.37	8.8	40.0	\$10.25	8.0	21.
Receptionists	9.09 12.05	3.0 9.9	34.2 36.2	9.31 12.37	3.1 9.8	39.8 38.8	8.12	5.4 4.0	21 19
Information clerks, n.e.c.						39.6	8.07	4.0	19
Correspondence clerks	13.61	6.4	39.2	13.63	6.4		0.40	6.7	24
Order clerks	11.06	2.4	38.0	11.27	2.5	39.9	8.48	6.7	24
Personnel clerks, except payroll and	10.50	1 4 4	074	10.64	4.2	20.2	11 50		10
timekeeping	12.59	4.1	37.4	12.64	4.3	39.3	11.52	3.2	18
Library clerks	9.47	4.1	28.5	10.13	6.1	38.1	7.78	5.7	17
File clerks	8.95	3.6	33.4	9.25	3.8	39.1	7.50	3.6	19
Records clerks, n.e.c.	11.18	2.9	37.2	11.32	3.0	39.2	9.37	6.8	
Bookkeepers, accounting and auditing clerks	11.19	2.3	37.4	11.52	1.8	39.2	7.27	8.1	24
Payroll and timekeeping clerks	13.14	3.9	37.9	13.41	4.0	39.7	7.88	4.4	20
Billing clerks	11.22	4.4	37.9	11.46	4.4	39.6	8.67	2.6	25
Cost and rate clerks	11.04	7.3	35.1	11.14	7.7	39.1	_	-	'
Billing, posting, and calculating machine	0.00		05.5	0.07	40.0	20.5			
operators	8.30	8.9	35.5	8.27	10.8	39.5	_	-	'
Duplicating machine operators	12.87	10.4	38.8	12.94	10.5	39.1	_	_	
Mail preparing and paper handling machine	0.00	0.4	004	0.74		000			
operators	8.62	3.4	33.4	8.71	3.9	38.9	_	-	
Office machine operators, n.e.c.	9.24	6.1	39.6	9.62	6.5	39.4	-	7	١ ۵
Telephone operators	12.08	4.8	34.8	12.68	9.8	39.0	8.31	3.7	20
Mail clerks, except postal service	8.39	5.4	34.9	8.66	6.5	38.9	7.24	6.6	24
Messengers	9.41	10.1	38.3	9.83	10.8	39.2	- 7.71	7.1	١.,
Dispatchers	10.89	5.7	37.8	11.22	6.2	40.3	7.71	7.1	2
Production coordinators	15.07 11.43	3.1 6.4	39.8 39.4	15.12 11.45	3.1 6.6	39.9 40.0	_	_	
Traffic, shipping and receiving clerks	10.63	3.8	34.0	11.45	2.6	39.9	- 6.06	3.5	19
Stock and inventory clerks Meter readers	13.48	6.0	39.0	13.61	5.8	40.0	6.86	3.5	13
	16.09		39.6	16.18		40.0	_	_	'
Weighers, measurers, checkers, and samplers Expeditors	12.55	7.5 3.0	38.7	12.68	7.5 6.2	40.0	_		
Material recording, scheduling, and distribution	12.55	3.0	30.7	12.00	0.2	40.0	_	_	'
clerks, n.e.c.	13.37	8.2	39.0	13.55	8.2	40.1	8.42	10.8	22
Insurance adjusters, examiners, and									
investigators	14.23	7.0	38.2	14.08	6.3	38.6	_	l	۱ ـ ا
Investigators and adjusters, except insurance	11.21	3.2	37.9	11.39	3.2	39.7	8.90	5.1	24
Eligibility clerks, social welfare	12.61	4.9	37.1	13.01	4.8	40.0	-		_
Bill and account collectors	10.52	3.2	38.2	10.68	3.0	40.0	7.84	5.4	22
General office clerks	10.45	1.5	36.3	10.77	1.6	39.3	7.92	3.0	22
Bank tellers	7.91	5.0	34.6	8.05	6.1	39.7	7.33	2.0	22
Data entry keyers	9.70 10.47	3.7	36.4 36.8	9.95 10.47	4.1	39.3 39.3	7.68	3.9	23
Statistical cierks	9.18	5.5	30.8	10.47 9.45	5.9 4.0	39.3	- 9.10	3.9	2
Teachers' aides	11.47	3.5 2.5	36.1	9.45 11.69	2.7	39.3	8.19 9.73	3.5	22
Auministrative support, n.e.c.								3.5	
lue collar	13.35	1.1	38.3	13.67	1.1	40.0	7.66	2.7	21
Precision production, craft, and repair	17.20	1.2	39.9	17.22	1.2	40.0	11.56	11.3	20
Supervisors, mechanics and repairers	22.26	4.1	40.5	22.26	4.1	40.5	_	-	
Automobile mechanics	17.09	9.9	40.4	17.09	9.9	40.4	_	-	
Bus, truck, and stationary engine mechanics	17.06	4.5	40.0	17.07	4.5	40.2	_	-	.
Aircraft engine mechanics	21.26	4.5	40.0	21.26	4.5	40.0	_	-	-
Automobile body and related repairers	21.41	8.5	40.8	21.41	8.5	40.8	_	-	-
Aircraft mechanics, except engine	20.74	2.2	40.0	20.74	2.2	40.0	_	-	-
Heavy equipment mechanics	15.95	7.4	40.0	15.95	7.4	40.0	_	-	.
Industrial machinery repairers	16.62	2.9	40.0	16.62	2.9	40.0	_	-	.
Machinery maintenance	14.18	2.1	39.8	14.19	2.1	39.9	-	-	.
Electronic repairers, communications and		1			1				
industrial equipment	14.40	5.7	40.0	14.40	5.7	40.0	-	-	.
Data processing equipment repairers	14.74	5.5	38.6	14.84	5.4	39.0	-	-	-
Household appliance and power tool repairers	_	_	-	15.77	6.5	40.0	-	-	-

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		1	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
Blue collar –Continued									
Precision production, craft, and repair -Continued									
Telephone installers and repairers	\$14.06	6.5	39.8	\$14.06	6.5	39.8	-	-	-
Heating, air conditioning, and refrigeration mechanics	15 51	5.5	38.8	15 50	5.8	40.0		_	
Office machine repairers	15.54 13.65	8.8	39.7	15.52 13.65	8.8	39.7	_	_	
Mechanical controls and valve repairers	16.14	6.3	37.0	16.64	6.0	39.6	_	_	l _
Millwrights	18.43	8.2	40.2	18.43	8.2	40.2	_	l _	l _
Mechanics and repairers, n.e.c.	16.42	2.3	39.9	16.45	2.3	40.0	_	l _	_
Supervisors, carpenters and related workers	23.28	5.1	40.0	23.28	5.1	40.0	_	_	_
Supervisors, electricians and power									
transmission installers	26.04	4.7	40.4	26.04	4.7	40.4	_	_	-
Supervisors, plumbers, pipefitters, and									
steamfitters	25.39	5.3	40.1	25.39	5.3	40.1	-	-	-
Supervisors, construction trades, n.e.c	20.72	4.7	39.8	20.72	4.7	39.8	_	-	-
Carpenters	18.09	6.4	39.9	18.08	6.4	40.0	_	-	-
Electricians	19.40	2.6	40.2	19.41	2.6	40.2	-	-	-
Electrician apprentices	12.48	4.2	41.0	12.48	4.2	41.0	-	-	-
Electrical power installers and repairers	22.02	3.9	40.0	22.02	3.9	40.0	_	-	-
Painters, construction and maintenance	19.16	4.6	40.0	19.16	4.6	40.0	_	-	-
Plumbers, pipefitters and steamfitters	21.06	2.5	40.3	21.06	2.5	40.3	_	_	-
Plumber, pipefitter, and steamfitter apprentices	14.89 21.53	12.7 8.5	44.5 40.0	14.89 21.53	12.7 8.5	44.5 40.0	_	_	-
Concrete and terrazzo finishers Paving, surfacing, and tamping equipment	21.55	0.5	40.0	21.00	0.5	40.0	_	-	-
operators	20.53	9.9	40.5	20.53	9.9	40.5	_	_	_
Construction trades, n.e.c.	19.16	12.8	39.2	19.17	12.8	39.3	_	1 _	
Supervisors, production	18.47	5.5	40.6	18.47	5.5	40.6	_	l _	١ ـ
Tool and die makers	19.61	3.5	40.1	19.61	3.5	40.1	_	l _	١ ـ
Tool and die maker apprentices	17.05	7.7	39.7	17.05	7.7	39.7	_	_	-
Precision assemblers, metal	16.59	5.5	40.5	16.59	5.5	40.5	_	_	-
Machinists	15.80	2.4	40.0	15.75	2.5	40.5	-	-	-
Precision grinders, filers, and tool sharpeners	16.90	5.9	40.2	16.90	5.9	40.2	-	-	-
Sheet metal workers	17.56	10.2	40.0	17.56	10.2	40.0	-	-	-
Cabinet makers and bench carpenters	12.03	6.6	40.0	12.03	6.6	40.0	-	-	-
Hand molders and shapers, except jewelers	16.80	8.1	40.1	16.80	8.1	40.1	-	-	-
Patternmakers, layout workers, and cutters	23.25	7.2	40.0	23.25	7.2	40.0	_	-	-
Electrical and electronic equipment assemblers	9.82	14.0	39.6	9.88	14.2	40.0	_	-	-
Miscellaneous precision workers, n.e.c	15.20	4.2	40.0	15.20	4.2	40.0	-	_	-
Butchers and meat cutters	9.94	15.8	39.9	9.93	15.8	40.0	_	_	-
Bakers	8.09	5.6 11.3	33.2 40.0	8.37 12.55	6.0	39.7 40.0	_	_	-
Food batchmakers Inspectors, testers, and graders	12.55 17.24	3.8	40.0	17.24	3.8	40.0	_	_	
Water and sewer treatment plant operators	14.60	2.5	40.0	14.60	2.5	40.2	_	1 _]
Power plant operators	21.55	5.2	39.9	21.55	5.2	39.9	_	l _	١.
Stationary engineers	19.69	5.4	39.5	19.69	5.4	39.6	_	_	١.
Miscellaneous plant and system operators,									
n.e.c	16.58	6.5	40.0	16.58	6.5	40.0	-	-	-
Machine operators, assemblers, and inspectors	12.25	1.9	39.8	12.32	1.8	40.0	\$6.62	4.3	26
Lathe and turning machine set-up operators	14.40	3.2	40.0	14.40	3.2	40.0	_		-
Lathe and turning machine operators	12.48	6.8	40.1	12.48	6.8	40.1	_	-	-
Milling and planing machine operators	14.73	6.6	40.0	14.73	6.6	40.0	_	-	-
Punching and stamping press operators	13.42	3.3	39.9	13.46	3.3	40.0	-	-	-
Rolling machine operators	13.58	9.1	41.3	13.58	9.1	41.3	-	-	-
Drilling and boring machine operators Grinding, abrading, buffing, and polishing	10.27	14.7	40.0	10.27	14.7	40.0	_	_	-
machine operators	11.59	4.7	39.8	11.63	4.8	40.0	-	-	-
Forging machine operators	12.09	3.3	40.0	12.09	3.3	40.0	-	-	-
Numerical control machine operators	12.14	5.2	40.0	12.14	5.2	40.0	-	-	-
Fabricating machine operators, n.e.c.	13.82	3.9	40.2	13.82	3.9	40.2	-	-	-
Molding and casting machine operators	10.11	3.6	39.9	10.12	3.6	39.9	-	_	-
Metal plating machine operators	11.84	8.7	41.7	11.84	8.7	41.7	-	_	-
Sawing machine operators	11.09	4.2	42.3	11.09	4.2	42.3	_	-	-

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		- I	Part time	
,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
lue collar -Continued									
Machine operators, assemblers, and inspectors									
-Continued									
Printing press operators	\$13.64	7.0	39.7	\$13.64	7.0	39.7	_	-	-
Photoengravers and lithographers	15.86	7.5	37.4	16.42	6.7	39.4	-	-	-
Typesetters and compositors	11.11	13.0	38.6	- 12.42	100	40.0	_	_	
Textile cutting machine operators	13.43 9.49	12.3 18.2	40.0 33.6	13.43	12.3	40.0 40.0	_	-	-
Textile sewing machine operators Laundering and dry cleaning machine operators	7.05	3.6	37.4	10.40 7.06	18.0 4.0	39.5	\$6.93	6.4	25
Cementing and gluing machine operators	12.16	7.4	40.0	12.16	7.4	40.0	φ0.93 —	0.4	2
Packaging and filling machine operators	12.10	5.7	38.6	12.10	5.0	40.0	_	-	
Extruding and forming machine operators	11.17	3.2	40.0	11.17	3.2	40.0	_	1 =	
Mixing and blending machine operators	13.29	3.2	40.0	13.29	3.2	40.1	_	_	Ι.
Separating, filtering, and clarifying machine	10.25	0.2	40.0	10.20	0.2	40.1			
operators	15.44	3.9	40.4	15.44	3.9	40.4	_	_	
Compressing and compacting machine operators	11.07	7.0	40.0	11.07	7.0	40.0	_	l _	
Painting and paint spraying machine operators	11.87	4.2	40.0	11.87	4.2	40.0	_	-	
Roasting and baking machine operators, food	13.41	10.2	38.5	13.45	10.5	40.0	_	_	
Washing, cleaning, and pickling machine									
operators	12.76	13.7	40.0	12.76	13.7	40.0	_	_	
Folding machine operators	12.42	4.4	40.0	12.42	4.4	40.0	_	-	
Furnace, kiln, and oven operators, except food	13.43	14.1	40.0	13.43	14.1	40.0	-	-	
Crushing and grinding machine operators	11.92	10.6	40.1	11.92	10.6	40.1	_	_	
Slicing and cutting machine operators Photographic process machine operators	13.28 12.47	4.7 10.9	39.9 39.5	13.28 12.57	4.7 10.9	40.0 40.0	_	-	
Miscellaneous machine operators, n.e.c.	11.53	4.2	39.9	11.55	4.2	40.0	7.53	7.5	2
Welders and cutters	14.14	2.5	40.0	14.16	2.5	40.0	-		_
Solders and braziers	10.09	20.8	39.9	10.09	20.8	39.9	_	_	
Assemblers	12.79	4.0	39.7	12.95	3.9	40.0	6.02	4.0	3
Hand cutting and trimming	6.88	7.0	40.0	6.88	7.0	40.0	_		
Hand molding, casting, and forming	12.77	8.8	40.0	12.77	8.8	40.0	_	_	
Hand painting, coating, and decorating	9.54	12.3	40.0	9.54	12.3	40.0	_	_	
Miscellaneous hand working, n.e.c.	10.53	7.7	40.0	10.54	7.7	40.1	-	_	
Production inspectors, checkers and examiners	11.05	4.6	39.9	11.06	4.6	40.1	_	_	
Production testers	12.95	8.0	40.0	12.95	8.0	40.0	_	-	
Graders and sorters, except agricultural	9.20	6.7	40.0	9.20	6.7	40.0	-	_	
Transportation and material moving	14.06	1.8	36.4	14.58	1.7	40.3	9.96	5.1	20
Supervisors, motor vehicle operators	16.14	9.0	39.9	16.16	9.0	40.3	44.07	-	١
Truck drivers Driver-sales workers	15.48 13.78	2.9 8.1	40.3 36.3	15.63 14.50	3.0 7.0	41.3 40.0	11.27	6.6	2
Bus drivers	12.39	4.0	25.3	13.74	3.0	36.3	11.32	6.7	2
Taxicab drivers and chauffeurs	8.05	10.2	32.5	9.55	11.7	40.0	6.02	3.8	2
Parking lot attendants	6.79	9.3	22.7	-	'		5.69	5.3	1
Motor transportation, n.e.c.	8.10	9.6	26.4	10.04	10.2	38.7	5.87	3.2	1
Railroad conductors and yardmasters	19.64	2.3	40.0	19.64	2.3	40.0	-	_	'
Locomotive operating	17.29	9.7	41.7	17.29	9.7	41.7	_	_	
Supervisors, material moving equipment	18.86	8.4	41.2	18.86	8.4	41.2	_	_	
Operating engineers	19.26	7.0	40.3	19.26	7.0	40.3	_	_	
Crane and tower operators	14.42	4.4	40.4	14.42	4.4	40.4	_	-	
Excavating and loading machine operators	16.86	5.9	40.1	16.86	5.9	40.1	_	-	-
Grader, dozer, and scrapper operators	17.82	17.0	40.7	17.82	17.0	40.7	-		
Industrial truck and tractor equipment operators Miscellaneous material moving equipment	12.46	1.8	39.7	12.51	1.9	39.9	8.25	7.7	23
operators, n.e.c.	14.04	5.7	35.9	14.51	5.7	40.1	-	_	
Handlers, equipment cleaners, helpers, and	40.40			44.40		00.0	0.04		_
laborers	10.40	2.0	34.7	11.13	2.0	39.8	6.84	2.0	2
Supervisors, agriculture-related workers	17.64	12.8	40.0	17.64	12.8	40.0	-		
Groundskeepers and gardeners, except farm	10.48	5.0	35.6	11.34	5.3	39.6	6.68	2.7	24
Animal caretakers, except farm	13.12	8.7	38.3	13.24	7.9	38.7	_	_	-

Table 3. Selected occupations, East North Central: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		F	Part time	
0 11 4	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
Blue collar -Continued									
Handlers, equipment cleaners, helpers, and laborers –Continued									
Supervisors, handlers, equipment cleaners, and									
laborers, n.e.c.	\$14.34	5.4	39.4	\$14.46	5.5	40.2	_	-	_
Helpers, mechanics and repairers	13.92	5.5	39.4	14.01	5.5	40.2	_	_	-
Helpers, construction trades	12.96	16.7	39.5	13.60	16.4	40.0	_	-	-
Construction laborers	15.55	5.2	39.8	15.55	5.2	39.8	_	-	-
Production helpers	10.86	4.6	39.2	11.02	4.4	40.0	\$6.84	3.8	26
Garbage collectors	11.97	17.1	39.3	-	_	_	_	_	-
Stock handlers and baggers Machine feeders and offbearers	8.95 9.44	1.7 4.0	29.1 39.3	10.37 9.56	1.6 4.1	39.4 40.0	6.37	2.3	19
		1			1		-		24
Freight, stock, and material handlers, n.e.c Garage and service station related	12.45 11.56	7.3 20.6	34.0 35.0	13.10 12.58	7.7 19.8	39.5 39.7	9.62	4.5	21
Vehicle washers and equipment cleaners	10.05	6.1	37.4	10.07	6.4	39.6	9.81	17.3	20
Hand packers and packagers	8.42	4.0	38.9	8.58	4.2	40.0	6.25	5.2	28
Laborers, except construction, n.e.c.	9.88	4.0	35.7	10.68	2.8	39.9	6.17	3.5	24
Namidae	9.26	1.3	31.3	10.30	1.4	39.1	6.20	1.1	19
Service	9.20 14.51	2.8	36.7	15.11	2.8	41.2	8.09	3.5	16
Supervisors, firefighters and fire prevention	17.29	4.1	50.7	17.29	4.1	51.0	-	_	'-
Supervisors, police and detectives	23.75	5.8	40.0	23.75	5.8	40.0	_	-	-
Supervisors, guards	14.33	9.5	37.6	14.51	9.2	38.6	_	-	-
Firefighting	15.49	3.6	44.6	15.71	3.4	50.3	8.82	7.4	10
Police and detectives, public service Sheriffs, bailiffs, and other law enforcement	19.31	2.5	39.3	19.37	2.4	39.8	-	-	-
officers	14.37	3.9	39.6	14.39	3.9	39.8	_	-	-
Correctional institution officers	13.63	4.1 11.4	38.5	13.73	4.1	39.2	-	_	13
Crossing guards Guards and police, except public service	6.88 8.30	4.5	13.2 31.9	- 8.31	5.7	39.5	6.88 8.26	11.4 5.0	18
Protective service, n.e.c.	10.15	12.7	25.9	12.02	14.3	39.3	6.88	4.5	16
Food service	6.64	2.1	27.9	7.66	2.3	38.2	5.22	1.8	20
Supervisors, food preparation and service	10.77	2.6	38.2	11.04	2.6	40.1	7.70	2.7	24
Bartenders	6.35	7.0	26.0	7.23	10.8	36.5	5.56	7.1	20
Waiters and waitresses	3.31	6.0	25.6	3.63	10.2	37.2	3.03	3.9	20
Cooks	8.36	2.3	33.2	8.69	2.2	38.0	7.02	3.2	21
Food counter, fountain, and related	5.55	3.4	22.9	6.09	5.8	36.8	5.25	3.7	19
Kitchen workers, food preparation	7.00	3.0	29.1	7.37	3.0	38.4	6.43	3.8	21
Waiters'/Waitresses' assistants	4.58	5.3	18.7	5.24	11.6	36.3	4.42	5.7	16
Food preparation, n.e.c.	6.53	2.4	27.0	7.19	3.0	38.5	5.90	1.9	21
Health sides, except pureing	8.38	1.4	33.3 33.9	8.50	1.7	38.5 37.9	7.84	1.9	20
Health aides, except nursing Nursing aides, orderlies and attendants	9.37 7.98	2.6 1.5	33.9	9.48 8.07	2.7 1.9	37.9	8.59 7.67	6.5 1.9	19
Cleaning and building serviceSupervisors, cleaning and building service	9.35	1.7	34.4	9.92	1.6	39.5	6.66	3.1	21
workers	12.72	4.7	40.0	12.74	4.7	40.2	_	-	-
Maids and housemen	6.40	1.6	31.3	6.47	2.1	38.7	6.22	2.0	21
Janitors and cleaners	9.65	1.7	34.6	10.22	1.5	39.5	6.79	3.7	21

Table 3. Selected occupations, East North Central: Mean hourly earnings1 and weekly hours for full-time and part-time workers,2 National Compensation Survey, 3 1997-Continued

		Total			Full time		F	Part time	
	Hourly e	arnings	Mean	Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	weekly	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Service –Continued Personal service	\$8.87 13.46 9.82	3.3 10.7 10.7	26.9 37.8 37.0	\$9.89 13.59 10.20	4.6 10.8 11.0	36.9 38.9 39.6	\$6.81 - -	1.7	17.4 - -
Attendants, amusement, and recreation facilities	6.25 7.56	2.0 7.7	22.6 29.4	<u> </u>	_ _	-	6.44	2.1	20.2
Ushers Public transportation attendants Baggage porters and bellhops	6.22 31.17 9.09	5.8 6.4 19.0	17.0 19.3 36.6	32.61 8.99	6.4 22.7	19.5 40.0	6.22	5.8	17.0
Welfare service aides Early childhood teachers' assistants Child care workers, n.e.c. Service, n.e.c.	7.10 7.30 8.59 8.24	3.9 5.8 3.8 3.9	29.5 27.3 24.7 27.1	7.44 7.48 9.45 9.14	4.7 7.5 5.6 4.8	38.8 38.0 39.0 38.5	6.16 6.92 7.29 6.53	5.4 4.8 2.0 3.2	17.8 17.4 16.0 17.3

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

² All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule based on the definition used by each working entired a full-time destablishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule.

3 In this census division, collection was conducted between October 1996 and May

^{1998.} The average reference period was August 1997.
A classification system including about 480 individual occupations is used to cover all

workers in the civilian economy. For more information, see Technical Note.

⁵ The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see Technical Note.

 $\label{thm:control} \begin{tabular}{ll} Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings 1 for full-time and part-time workers, 2 National Compensation Survey, 3 1997 $$$

		Total			Full time		F	Part time	
,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear weekl hours
AII	\$14.85	1.0	36.3	\$15.62	1.1	39.8	\$8.28	1.9	20.7
All excluding sales	14.89	.9	36.6	15.56	.9	39.8	8.59	2.1	20.8
White collar	18.28	1.4	36.5	19.11	1.5	39.8	10.74	2.9	20.8
White collar excluding sales	18.92	1.3	37.4	19.39	1.2	39.8	13.06	3.3	21.2
Professional specialty and technical	21.66	1.4	36.2	21.98	1.4	39.7	18.50	3.6	19.2
Professional specialty	23.37 27.25	1.5 1.5	36.3 40.4	23.68 27.25	1.6 1.5	39.8 40.4	20.33	4.0	19.4
Engineers, architects, and surveyors Metallurgical and materials engineers	27.23	4.5	40.4	27.23	4.5	40.4	_	_	_
Civil engineers	22.38	4.8	40.0	22.38	4.8	40.0	_	_	_
Electrical and electronic engineers	28.85	4.9	40.4	28.85	4.9	40.4	_	-	_
Industrial engineers	24.01	2.6	40.5	24.02	2.6	40.5	_	-	-
Mechanical engineers	26.14	4.5	40.6	26.11	4.5	40.7	_	-	-
Engineers, n.e.c.	28.17	2.0	40.3	28.19	2.0	40.3	-	-	-
Mathematical and computer scientists	27.84	3.1	39.8	27.86	3.2	39.9	24.94	8.7	26.0
Computer systems analysts and scientists Operations and systems researchers and	27.35	2.6	39.9	27.35	2.6	40.0	27.30	4.0	29.6
analysts	29.10	7.8	39.4	29.16	7.8	39.6	_	-	-
Actuaries	31.43	11.3	38.3	31.43	11.3	38.3	_	-	-
Natural scientists	25.49	9.4	38.9	25.63	9.8	40.5	_	-	-
Chemists, except biochemists	28.98 27.21	6.5 9.8	40.3 38.4	28.98 27.72	6.5 9.8	40.3 40.1	_	_	_
Physical scientists, n.e.c	18.38	8.8	35.6	18.04	9.6	39.8	_	_	
Health related	21.39	1.3	32.2	21.28	1.6	39.7	21.76	3.9	20.2
Physicians	46.37	12.6	36.1	42.87	14.0	43.5	67.82	6.5	17.6
Registered nurses	18.98	1.2	31.7	18.94	1.5	39.4	19.10	1.5	20.7
Pharmacists	27.24	2.7	30.8	26.58	2.1	40.0	29.52	8.5	17.2
Dietitians	16.39	4.3	35.8	16.06	5.0	40.0	18.89	5.1	20.2
Respiratory therapists	16.10	1.5	31.5	16.17	1.9	39.4	15.86	2.6	18.1
Occupational therapists Physical therapists	23.89 24.05	3.9 5.7	32.7 34.9	24.07 23.46	4.3 6.2	40.0 39.8	22.94 28.23	4.7 9.6	16.7
Speech therapists	21.35	3.5	33.0	20.72	3.4	40.0	20.23	3.0	10.0
Therapists, n.e.c.	15.61	5.6	36.5	15.81	6.0	38.5	13.52	2.2	23.7
Physicians' assistants	24.44	15.8	30.5	_	_	-	_	_	_
Teachers, college and university	31.57	6.3	36.5	31.71	6.3	41.1	28.58	16.1	10.6
Biological science teachers	29.50	8.1	37.7	29.50	8.1	37.7	_	-	-
Engineering teachers	34.31	5.4	38.5	34.31	5.4	38.5	_	_	_
Mathematical science teachers Medical science teachers	30.35 39.55	6.7 26.9	41.1 44.9	30.47 38.61	6.7 27.6	42.8 45.4	_	_	_
Business, commerce, and marketing teachers	-		-	32.13	8.7	39.7	_	_	_
Art, drama, and music teachers	29.72	13.6	32.1	29.92	16.1	40.3	28.69	7.2	15.7
Education teachers	27.80	3.5	36.5	27.83	3.5	38.1	-	-	_
English teachers	23.30	5.8	35.4	23.36	5.9	37.3	-	-	-
Foreign language teachers	28.39	13.8	35.6	28.99	14.4	41.1	-	-	_
Theology teachers Teachers, post secondary, subject not specified	24.91 27.39	12.9 12.6	39.5 28.5	24.91 28.54	12.9 14.9	39.5 38.0	_ 20.77	24.8	11.7
Teachers, post secondary, n.e.c.	25.95	12.4	30.5	26.41	12.5	36.1	18.41	9.4	8.7
Teachers, except college and university	15.36	3.5	31.4	16.33	3.2	37.9	9.50	15.1	15.5
Prekindergarten and kindergarten	10.14	18.0	33.3	11.01	17.4	38.7	_	_	_
Elementary school teachers	17.95	2.0	35.1	18.03	2.0	36.9	16.19	7.9	17.9
Secondary school teachers	20.23	3.8	36.3	20.33	3.9	37.5	_	-	-
Teachers, n.e.c.	14.59	12.4	16.5	17.41	11.9	39.4	10.29	16.2	8.8
Substitute teachers Vocational and educational counselors	8.65 16.87	2.3 11.6	9.7 39.2	- 16.96	11.7	39.8	8.65	2.3	9.7
Librarians, archivists, and curators	17.08	4.6	33.0	16.98	4.8	39.0	_	_	_
Librarians	17.40	4.8	35.4	17.16	5.0	39.2	_	-	_
Archivists and curators	14.07	13.9	20.0	15.09	12.7	37.4	-	-	-
Social scientists and urban planners	19.91	4.8	36.3	19.82	4.9	39.6	21.83	15.2	13.6
Economists	20.69	5.3	39.4	20.64	5.5	40.0	-	-	-
Psychologists	19.05	8.5	35.8	18.91	8.9	39.2	-	-	-
Social, recreation, and religious workers Social workers	13.09 13.14	1.8	37.6 37.6	13.17 13.15	1.8 1.7	38.9 38.9	11.35 13.01	11.9 6.6	21.1
Recreation workers	13.14	'.'	31.0	9.99	11.1	39.6	-	- 0.0	19.5
Clergy	15.93	15.3	40.8	16.54	14.2	40.9	_	_	

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		I	Part time	
,	Hourly 6	earnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
White collar –Continued									
Professional specialty and technical -Continued									
Professional specialty –Continued Social, recreation, and religious workers									
-Continued Religious workers, n.e.c	\$17.71	10.7	37.4	_	_	_	_	_	_
Lawyers and judges	46.90	16.6	40.6	\$46.90	16.6	40.6	_	_	-
Lawyers	46.90	16.6	40.6	46.90	16.6	40.6	_	-	-
Writers, authors, entertainers, athletes, and				40.00	l		* 40.00		١
professionals, n.e.c.	19.84 19.12	5.3 5.0	38.8	19.98	5.4 4.9	39.6 39.8	\$13.29	7.0	19
Technical writers Designers	21.45	7.6	38.6 39.7	19.51 21.45	7.6	39.7	_	_	
Actors and directors	17.97	20.0	40.0	17.97	20.0	40.0	_	_	
Painters, sculptors, craft artists, and artist		-5.5							
printmakers	13.45	8.3	39.5	13.45	8.3	39.5	_	-	-
Photographers	16.16	7.4	39.6	16.26	7.5	39.6	_	-	-
Artists, performers, and related workers, n.e.c.	12.82	11.0	22.6	-		-	_	-	-
Editors and reporters	18.26 23.03	9.1 14.6	40.2 39.8	18.25	9.1	40.2 39.8	-	_	'
Public relations specialists Athletes	23.03 16.14	7.1	30.8	23.03 17.12	14.6 7.3	39.5	7.30	11.2	10
Professional, n.e.c.	20.17	5.1	39.4	20.19	5.2	40.0	-	-	'`
Technical	17.51	2.2	35.9	17.87	2.3	39.3	13.83	3.7	18
Clinical laboratory technologists and technicians	15.03	2.2	34.1	15.23	2.8	39.6	14.09	6.4	20
Health record technologists and technicians	11.25	4.8	34.5	11.14	5.6	39.4	-		~
Radiological technicians	16.11	3.6	30.8	16.26	4.4	39.5	15.69	6.0	19
Licensed practical nurses	12.43	2.4	33.7	12.22	2.7	39.2	13.49	2.7	19
Health technologists and technicians, n.e.c	12.51	2.7	31.5	12.89	3.0	39.7	10.92	4.5	16
Electrical and electronic technicians	19.03	2.3	39.1	19.20	2.3	40.3	_	-	'
Industrial engineering technicians Mechanical engineering technicians	14.32 19.58	8.8 5.0	40.0 40.7	14.32 19.58	8.8 5.0	40.0 40.7	_		
Engineering technicians, n.e.c.	20.56	4.3	40.0	20.62	4.3	40.1	_	_	
Drafters	17.46	4.4	39.9	17.49	4.4	40.0	_	_	
Chemical technicians	16.01	4.2	39.1	16.08	4.3	39.8	_	-	
Science technicians, n.e.c.		I		16.54	2.6	39.9	_	-	
Airplane pilots and navigators	71.12	29.1	25.3	71.12	29.1	25.3	_	-	
Broadcast equipment operators	11.41 21.13	13.4 2.3	37.6 39.3	11.81 21.01	14.5 2.2	40.0 39.5	_	_	
Computer programmers Legal assistants	20.60	5.8	38.5	20.70	5.9	39.5	_	_	'
Technical and related, n.e.c.	18.09	8.7	39.8	18.10	8.8	39.9	_	_	
Executive, administrative, and managerial	27.33	1.3	40.3	27.37	1.3	40.4	19.45	8.8	2
Executives, administrators, and managers	31.29	1.8	40.9	31.31	1.8	41.0	22.63	19.1	2
Financial managers	30.03	3.5	40.1	30.10	3.6	40.2	_	-	
Personnel and labor relations managers	32.79	4.2	41.9	32.79	4.2	41.9	_	-	
Purchasing managers	30.83	5.7	40.0	30.83	5.7	40.0	_	-	
Managers, marketing, advertising, and public relations	36.09	4.4	41.2	36.09	4.4	41.2			
Administrators, education and related fields	25.41	10.0	42.6	25.50	10.0	42.9	_	_	
Managers, medicine and health	27.04	3.5	39.8	27.00	3.5	40.2	_	_	
Managers, food servicing and lodging									
establishments Managers, service organizations, n.e.c	15.69 19.59	5.9 10.1	45.3 41.0	15.72 19.63	5.9 10.1	45.5 41.2	_	_	
Managers and administrators, n.e.c.	33.68	2.4	40.9	33.69	2.4	40.9	_	_	-
Management related	22.03	1.2	39.6	22.06	1.2	39.7	17.86	5.7	25
Accountants and auditors	17.88	8.7	39.9	17.87	8.7	40.0	-	-	
Underwriters	26.54	20.6	38.6	26.54	20.6	38.6	-	-	-
Other financial officers	22.16	4.2	39.6	22.16	4.2	39.8	-	-	'
Management analysts Personnel, training, and labor relations	22.09	5.3	39.3	22.09	5.3	39.3	_	_	-
specialists	21.43	3.7	39.3	21.51	3.8	39.8	16.64	7.3	22
Buyers, wholesale and retail trade, except farm	10.05	0.4	40.0	10.06	0.4	44 4			
products	19.95	9.1	40.8	19.96	9.1	41.4	_	_	-

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total		ı	Full time		F	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
White collar –Continued									
Executive, administrative, and managerial									
-Continued									
Management related –Continued	004.05	4.0	000	004.50	4.0	000			
Purchasing agents and buyers, n.e.c	\$24.35 21.88	4.2 7.1	39.8 40.0	\$24.50 21.88	4.2 7.1	39.8 40.0	_	_	-
Construction inspectors	21.00	/.1	40.0	21.00	/.1	40.0	_	_	-
construction	20.34	5.9	40.4	20.34	5.9	40.4	_	_	١.
Management related, n.e.c.	25.39	2.3	39.3	25.45	2.3	39.4	\$19.81	9.1	30

Sales	14.16	6.0	31.9	16.86	6.5	40.1	6.59	1.2	20
Supervisors, sales	17.68	4.8	39.6	17.89	4.8	40.4	_	-	-
Insurance sales	21.15	18.8	32.7	22.91	16.6	38.0	-	_	-
Real estate sales	26.44	17.6	38.2	26.44	17.6	38.2	_	-	
Securities and financial services sales	37.95	11.7	40.4	37.95	11.7	40.4	_	-	-
Advertising and related sales	16.73	15.6	37.7	17.20	16.8	39.6	_	_	
Sales, other business services	27.06	30.6	39.3	27.48	30.6	40.0	-	-	'
Sales engineers	30.76	15.8	41.3	30.76	15.8	41.3	-	_	'
and wholesale	26.06	7.3	41.0	26.06	7.3	41.0	_	_	
Sales workers, motor vehicles and boats	16.63	8.1	43.2	16.63	8.1	43.2	_	_	
Sales workers, apparel	6.58	5.2	27.2	7.40	9.4	38.8	5.88	2.0	2
Sales workers, furniture and home furnishings	11.43	9.7	33.7	12.62	7.0	40.3	8.53	5.3	2
Sales workers, radio, tv, hi-fi, and appliances	12.11	17.7	36.3	13.00	16.5	40.4	-	_	-
Sales workers, hardware and building supplies	8.91	10.0	35.4	9.37	9.9	39.8	_	_	
Sales workers, parts	14.08	6.4	40.0	14.22	6.4	40.5	_	-	
Sales workers, other commodities	9.14	5.6	29.1	10.79	7.7	39.6	6.83	1.5	2
Sales counter clerks	8.01	7.2	27.3	9.40	4.0	40.6	6.08	6.3	18
Cashiers	6.95	1.8	25.3	7.65	3.7	38.5	6.44	1.4	20
Demonstrators, promoters, and models, sales Sales support, n.e.c	9.30 11.51	9.1 5.5	19.7 38.9	_ 11.76	5.6	40.0	6.88 7.59	6.4 6.2	14 26
Administrative support, including clerical	11.45	1.2	36.8	11.77	1.2	39.5	8.59	2.5	22
Supervisors, general office	15.32	4.9	39.8	15.40	5.0	39.8	-		
Supervisors, computer equipment operators	20.45	11.0	39.8	20.45	11.0	39.8	_	_	
Supervisors, financial records processing	17.85	7.2	39.6	17.85	7.2	39.6	_	_	
Supervisors, distribution, scheduling, and									
adjusting clerks	16.66	5.6	40.7	16.68	5.6	40.8	-	-	
Computer operators	13.51	4.9	39.8	13.51	4.9	39.8	·		
Secretaries	12.79	2.0	37.7	12.89	2.0	39.3	11.29	8.2	2
Stenographers	11.27	4.0	32.6	11.93	5.3	39.3	9.97	3.4	2
Typists	11.47	4.4 2.7	36.4	12.08 9.95	4.2	38.8 39.8	8.45	4.3	2
Interviewers	9.52 7.93	2.7	32.9 33.4	9.95 8.39	1.7 4.0	39.6	8.17	5.0	2
Hotel clerks Transportation ticket and reservation agents	12.78	8.4	34.3	13.37	8.8	40.0	10.25	8.0	2
Receptionists	8.93	2.8	34.3	9.11	2.9	39.9	8.17	5.6	2
Information clerks, n.e.c.	12.03	10.1	36.2	12.35	10.0	38.8	8.08	4.1	19
Correspondence clerks	13.61	6.4	39.2	13.63	6.4	39.6	-		'
Order clerks	11.06	2.4	38.0	11.26	2.6	39.9	8.48	6.7	24
Personnel clerks, except payroll and									
timekeeping	12.20	4.7	36.8	12.24	4.9	39.5	11.52	3.2	18
Library clerks	10.13	8.1	30.5	11.45	6.8	39.2	7.19	4.0	20
File clerks	8.90	3.6	33.3	9.20	3.9	39.2	7.50	3.6	19
Records clerks, n.e.c.	10.82	2.5	36.9	10.95	2.6	39.4	9.45	7.0	22
Bookkeepers, accounting and auditing clerks	11.04	2.8	37.2	11.40	2.1	39.2	7.09	7.6	23
Payroll and timekeeping clerks	12.90	4.1	37.8	13.19	4.2	39.8	7.88	4.4	20
Billing clerks Cost and rate clerks	11.21 11.04	4.6 7.3	37.8 35.1	11.45	4.6	39.6 39.1	8.63	2.8	2
Billing, posting, and calculating machine	11.04	1.3	35.1	11.14	7.7	39.1	_	_	Ι.
operators	8.30	8.9	35.5	8.27	10.8	39.5	_	_	Ι.
Duplicating machine operators	11.52	10.4	38.2	11.60	10.5	38.7	_	_	[
Mail preparing and paper handling machine			55.2		.5.0	55.7			
operators	8.62	3.4	33.4	8.71	3.9	38.9	_	_	-

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		- 1	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
White collar –Continued									
Administrative support, including clerical									
-Continued									
Office machine operators, n.e.c.	\$8.78	5.1	39.5	\$9.05	6.6	39.2		I	
Telephone operators	12.34	4.6	34.5	13.02	9.5	38.9	\$8.31	3.7	20.
Mail clerks, except postal service	8.27	5.5	34.8	8.54	6.7	38.9	7.24	6.6	24.
Messengers	9.39	10.9	38.7	9.81	11.7	39.2	-	_	-
Dispatchers	10.90	7.8	39.3	10.95	7.7	40.7	_	-	-
Production coordinators	15.07	3.1	39.8	15.12	3.1	39.9	_	-	-
Traffic, shipping and receiving clerks	11.43	6.4	39.4	11.45	6.6	40.0	_	-	-
Stock and inventory clerks	10.55	4.0	33.9	11.30	2.7	40.0	6.86	3.5	19.
Meter readers	13.86	5.8	38.9	14.03	5.5	40.0	-	_	-
Weighers, measurers, checkers, and samplers	16.22	7.9	39.5	16.31	7.9	40.0	_	_	-
Expeditors	12.55	3.0	38.7	12.69	6.2	40.0	_	_	-
Material recording, scheduling, and distribution					1				
clerks, n.e.c.	13.37	8.2	39.1	13.55	8.2	40.1	8.42	10.8	22
Insurance adjusters, examiners, and									
investigators	14.23	7.0	38.2	14.08	6.3	38.6	_	-	-
Investigators and adjusters, except insurance	11.12	3.3	38.0	11.31	3.3	39.7	8.70	5.1	24
Eligibility clerks, social welfare	10.68	4.1	34.8	10.79	4.5	40.0	_	-	-
Bill and account collectors	10.48	3.2	38.2	10.64	3.1	40.0	7.84	5.4	22
General office clerks	10.04	2.0	35.9	10.40	2.1	39.4	7.80	3.2	22
Bank tellers	7.91	5.0	34.6	8.05	6.1	39.7	7.33	2.0	22
Data entry keyers	9.56	4.1	36.2	9.83	4.5	39.5	7.68	3.9	23
Statistical clerks	10.41	6.6	36.7	10.41	7.2	39.8	_	-	-
Teachers' aides	6.55	3.8	24.6	_	_	_	6.31	4.6	22
Administrative support, n.e.c.	11.51	2.6	36.2	11.71	2.8	39.5	9.98	3.7	22
lue collar	13.28	1.3	38.4	13.61	1.3	40.0	7.32	3.0	21.
Precision production, craft, and repair	17.28	1.3	39.9	17.30	1.3	40.1	11.40	21.1	20.
Supervisors, mechanics and repairers	22.88	4.1	40.6	22.88	4.1	40.6	_		
Automobile mechanics	17.33	11.4	40.5	17.33	11.4	40.5	_	l –	_
Bus, truck, and stationary engine mechanics	17.24	5.4	40.0	17.25	5.4	40.2	_	l _	_
Aircraft engine mechanics	21.26	4.5	40.0	21.26	4.5	40.0	_	l _	_
Automobile body and related repairers	21.41	8.5	40.8	21.41	8.5	40.8	_	l _	_
Aircraft mechanics, except engine	20.74	2.2	40.0	20.74	2.2	40.0	_	l _	١ ـ
Heavy equipment mechanics	16.24	8.5	40.0	16.24	8.5	40.0	_	l _	١ ـ
Industrial machinery repairers	16.62	2.9	40.0	16.62	2.9	40.0	_	l _	Ι.
Machinery maintenance	14.24	2.1	40.0	14.25	2.1	40.1	_	_	١.
Electronic repairers, communications and	17.27	2.1	10.0	14.20		10.1			
industrial equipment	14.40	5.7	40.0	14.40	5.7	40.0	_	_	Ι.
Data processing equipment repairers	14.74	5.5	38.6	14.84	5.4	39.0	_	l _	Ι.
Household appliance and power tool repairers	-	3.3	30.0	15.77	6.5	40.0	_		
Telephone installers and repairers	14.06	6.5	39.8	14.06	6.5	39.8	_	_	
Heating, air conditioning, and refrigeration	17.00	0.5	03.0	17.00	0.5	03.0	_	-	
mechanics	15.32	9.3	40.0	15.32	9.3	40.0	_	_	
Office machine repairers	13.32	10.2	39.7	13.32	10.2	39.7	_	-	-
	18.43		40.2	18.43	8.3	40.2	_	_	-
Millwrights Mechanics and repairers, n.e.c.	16.43	8.3 2.5	39.8	16.43	2.5	40.2	_	-	-
Supervisors, carpenters and related workers	23.28	5.1	40.0	23.28	5.1	40.0	_	-	-
	23.20] 3.1	40.0	23.20] 3.1	40.0	-	1 -	-
Supervisors, electricians and power transmission installers	26.04	4.7	40.4	26.04	4.7	40.4	_	_	
					1	39.8		_	-
Supervisors, construction trades, n.e.c.	21.21 18.10	5.4 7.0	39.8 39.9	21.21 18.09	5.4	39.8 40.0	_	-	-
Carpenters					7.1				-
Electricians	19.46	2.8	40.2	19.48	2.8	40.2	-	_	-
Electrician apprentices	12.48	4.2	41.0	12.48	4.2	41.0	_	_	-
Electrical power installers and repairers	22.45	3.9	40.0	22.45	3.9	40.0	-	-	-
Painters, construction and maintenance	19.85	5.6	40.0	19.85	5.6	40.0	-	_	-
Plumbers, pipefitters and steamfitters	21.57	2.3	40.4	21.57	2.3	40.4	-	-	-
Concrete and terrazzo finishers	21.65	8.6	40.0	21.65	8.6	40.0	-	_	-
Paving, surfacing, and tamping equipment	04 ===	_	400	04 ===		40.0			
operators	21.79	7.8	40.6	21.79	7.8	40.6	_	_	-

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total		F	Full time		F	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
Blue collar -Continued									
Precision production, craft, and repair -Continued									
Supervisors, production	\$18.49	5.6	40.6	\$18.49	5.6	40.6	-	_	-
Tool and die makers	19.61	3.5	40.1	19.61	3.5	40.1	-	_	-
Tool and die maker apprentices	17.05	7.7	39.7	17.05	7.7	39.7	_	_	-
Precision assemblers, metal	16.59	5.5	40.5	16.59	5.5	40.5	_	_	-
Machinists	15.73	2.4	40.0	15.68	2.4	40.5	_	-	-
Precision grinders, filers, and tool sharpeners	16.90	5.9	40.2	16.90	5.9	40.2	_	_	-
Sheet metal workers	17.56	10.2	40.0	17.56	10.2	40.0	_	_	-
Cabinet makers and bench carpenters	11.47	4.2	40.0	11.47	4.2	40.0	-	-	-
Hand molders and shapers, except jewelers	16.80	8.1	40.1	16.80	8.1	40.1	_	_	-
Patternmakers, layout workers, and cutters	23.25	7.2	40.0	23.25	7.2	40.0	_	_	-
Electrical and electronic equipment assemblers	9.82	14.0	39.6	9.88	14.2	40.0	_	_	'
Miscellaneous precision workers, n.e.c	15.22	4.2	40.0	15.22	4.2	40.0	_	_	-
Butchers and meat cutters	9.94	15.8	39.9	9.93	15.8	40.0	_	_	-
Bakers	8.09	5.6	33.2	8.37	6.0	39.7	-	-	-
Food batchmakers	12.55	11.3	40.0	12.55	11.3	40.0	_	_	'
Inspectors, testers, and graders	17.23	3.9	40.2	17.23	3.9	40.2	_	_	'
Power plant operators	21.19	5.4	40.0	21.19	5.4	40.0	_	-	
Stationary engineers	20.39	5.5	39.8	20.41	5.5	40.0	_	-	
Miscellaneous plant and system operators, n.e.c.	16.70	6.8	40.0	16.70	6.8	40.0	_	_	
Machine operators, assemblers, and inspectors	12.25	1.9	39.8	12.32	1.8	40.0	\$6.61	4.3	26
Lathe and turning machine set-up operators	14.40	3.2	40.0	14.40	3.2	40.0	_	-	
Lathe and turning machine operators	12.48	6.8	40.1	12.48	6.8	40.1	_	_	
Milling and planing machine operators	14.73	6.6	40.0	14.73	6.6	40.0	_	_	
Punching and stamping press operators	13.42	3.3	39.9	13.46	3.3	40.0	_	_	
Rolling machine operators	13.58	9.1	41.3	13.58	9.1	41.3	_	-	
Drilling and boring machine operators	10.27	14.7	40.0	10.27	14.7	40.0	-	_	
machine operators	11.59	4.7	39.8	11.63	4.8	40.0	_	_	
Forging machine operators	12.09	3.3	40.0	12.09	3.3	40.0	_	_	
Numerical control machine operators	12.14	5.2	40.0	12.14	5.2	40.0	_	_	
Fabricating machine operators, n.e.c	13.82	3.9	40.2	13.82	3.9	40.2	_	_	
Molding and casting machine operators	10.11	3.6	39.9	10.12	3.6	39.9	_	_	
Metal plating machine operators	11.84	8.7	41.7	11.84	8.7	41.7	_	_	
Sawing machine operators	11.09	4.2	42.3	11.09	4.2	42.3	_	_	
Printing press operators	13.66	7.1	39.7	13.66	7.1	39.7	_	_	
Photoengravers and lithographers	15.86	7.5	37.4	16.42	6.7	39.4	_	-	
Textile cutting machine operators	13.43	12.3	40.0	13.43	12.3	40.0	_	-	
Textile sewing machine operators	9.49	18.2	33.6	10.40	18.0	40.0	_	_	
Laundering and dry cleaning machine operators	6.91	3.6	37.2	6.91	4.1	39.5	6.93	6.4	2
Cementing and gluing machine operators	12.16	7.4	40.0	12.16	7.4	40.0	_	_	
Packaging and filling machine operators	12.61	5.7	38.6	12.84	5.0	40.0	_	_	
Extruding and forming machine operators	11.17	3.2	40.0	11.17	3.2	40.0	-	_	
Mixing and blending machine operators Separating, filtering, and clarifying machine	13.29	3.2	40.0	13.29	3.2	40.1	-	_	
operators Compressing and compacting machine	15.44	3.9	40.4	15.44	3.9	40.4	_	-	
operators	11.07	7.0	40.0	11.07	7.0	40.0	_	_	-
Painting and paint spraying machine operators	11.87	4.2	40.2	11.87	4.2	40.2	_	_	-
Roasting and baking machine operators, food Washing, cleaning, and pickling machine	13.41	10.2	38.5	13.45	10.5	40.0	-	-	
operators	12.76	13.7	40.0	12.76	13.7	40.0	_	_	-
Folding machine operators	12.42	4.4	40.0	12.42	4.4	40.0	_	_	-
Furnace, kiln, and oven operators, except food	13.31	14.2	40.0	13.31	14.2	40.0	_	_	-
Crushing and grinding machine operators	11.92	10.6	40.1	11.92	10.6	40.1	_	_	.
Slicing and cutting machine operators	13.28	4.7	39.9	13.28	4.7	40.0	_	_	-
Photographic process machine operators	12.47	10.9	39.5	12.57	10.9	40.0	_	_	-
Miscellaneous machine operators, n.e.c	11.52	4.2	39.9	11.54	4.2	40.0	7.53	7.5	29
Welders and cutters	14.15	2.5	40.0	14.18	2.5	40.0	_	_	-
Solders and braziers	10.09	20.8	39.9	10.09	20.8	39.9	_	_	Ι.

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings¹ for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		F	Part time	
_ ,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
Blue collar -Continued									
Machine operators, assemblers, and inspectors									
-Continued									
Assemblers	\$12.79	4.0	39.7	\$12.95	3.9	40.0	\$6.02	4.0	31.
Hand cutting and trimming	6.88	7.0	40.0	6.88	7.0	40.0 40.0	_	_	-
Hand molding, casting, and forming	12.77 9.25	8.8 12.8	40.0 40.0	12.77 9.25	8.8 12.8	40.0	_		
Hand painting, coating, and decorating	10.53	7.7	40.0	10.54	7.7	40.0	_	_	
Production inspectors, checkers and examiners	11.05	4.6	39.9	11.06	4.6	40.1	_	-	
Production testers	12.95	8.0	40.0	12.95	8.0	40.0	_	1 =	
Graders and sorters, except agricultural	9.20	6.7	40.0	9.20	6.7	40.0	-	_	-
Transportation and material moving	14.12	2.0	37.2	14.63	2.0	40.6	9.11	7.9	20
Supervisors, motor vehicle operators	14.68	11.4	40.1	14.71	11.4	40.6	-	_	-
Truck drivers	15.67	3.1	40.4	15.83	3.1	41.4	11.46	6.4	24
Driver-sales workers	13.78	8.1	36.3	14.50	7.0	40.0	_	_	-
Bus drivers	10.51	12.4	21.5	10.36	21.1	40.0	10.54	14.2	19
Taxicab drivers and chauffeurs	8.05	10.2	32.5	9.55	11.7	40.0	6.02	3.8	25
Parking lot attendants	6.55	9.8	21.6	_	_	-	5.69	5.3	18
Motor transportation, n.e.c.	7.12	6.5	25.2	8.54	7.2	38.7	5.87	3.2	19
Railroad conductors and yardmasters	19.64	2.3	40.0	19.64	2.3	40.0	-	-	-
Locomotive operating	17.34	10.0	41.8	17.34	10.0	41.8	_	-	-
Supervisors, material moving equipment	18.86	8.4	41.2	18.86	8.4	41.2	_	-	-
Operating engineers	21.71	5.0	40.5	21.71	5.0	40.5	_	-	-
Crane and tower operators	14.42	4.4	40.4	14.42	4.4	40.4	_	-	-
Excavating and loading machine operators	17.28	7.2	40.2	17.28	7.2	40.2	-		-
Industrial truck and tractor equipment operators Miscellaneous material moving equipment	12.46	1.9	39.7	12.50	1.9	39.9	8.25	7.7	23
operators, n.e.c.	13.96	6.0	35.6	14.47	6.2	40.1	_	_	-
Handlers, equipment cleaners, helpers, and laborers	10.27	2.2	34.5	11.01	2.2	39.8	6.83	2.1	21
Groundskeepers and gardeners, except farm	8.93	7.8	35.3	9.36	8.9	39.6	6.98	1.3	23
·	0.93	7.0	33.3	9.30	0.9	39.9	0.90	1.3	20
Supervisors, handlers, equipment cleaners, and	40.07	1.0	00.4	40.70		40.0			
laborers, n.e.c.	13.67	4.8	39.4	13.79	5.0	40.2	-	-	-
Helpers, mechanics and repairers Helpers, construction trades	13.93 12.98	6.1 16.7	40.2 39.5	13.93 13.60	6.1 16.4	40.2 40.0	_	_	
Construction laborers	15.75	5.6	39.8	15.75	5.6	39.8	_	-	
Production helpers	10.85	4.6	39.2	11.02	4.4	40.0	6.84	3.8	26
Stock handlers and baggers	8.93	1.7	29.1	10.34	1.6	39.4	6.37	2.3	19
Machine feeders and offbearers	9.44	4.0	39.3	9.56	4.1	40.0	-		``.
Freight, stock, and material handlers, n.e.c	12.43	7.4	34.0	13.08	7.8	39.5	9.62	4.5	21
Garage and service station related	11.59	24.5	34.4	12.87	23.3	40.0	-	_	-
Vehicle washers and equipment cleaners	10.05	6.1	37.4	10.07	6.4	39.6	9.81	17.3	20
Hand packers and packagers	8.42	4.0	38.9	8.58	4.2	40.0	6.25	5.2	28
Laborers, except construction, n.e.c	9.80	4.5	35.3	10.68	3.3	39.9	6.15	3.5	24
Service	7.63	1.2	29.8	8.40	1.4	38.6	5.96	1.2	20
Protective service	8.18	4.3	31.6	8.30	5.6	39.7	7.73	4.2	18
Supervisors, guards	12.60	11.1	38.0	12.84	10.8	40.1	_	_	-
Guards and police, except public service	7.75	3.9	32.0	7.71	5.0	39.6	7.89	4.8	18
Protective service, n.e.c.	7.78	17.7	19.4	_	_	_	6.48	5.2	15
Food service	6.45	2.4	27.8	7.51	2.6	38.5	5.08	2.0	20
Supervisors, food preparation and service	10.83	2.8	38.7	11.12	2.7	40.8	7.60	2.4	24
Bartenders	6.35	7.0	26.0	7.23	10.8	36.5	5.56	7.1	20
Waiters and waitresses	3.31	6.0	25.6	3.63	10.2	37.2	3.03	3.9	20
Cooks	8.12	2.9	33.3	8.51	2.8	38.6	6.64	2.7	22
Food counter, fountain, and related	5.54	3.5	23.0	6.09	5.8	36.8	5.24	3.8	19
Kitchen workers, food preparation	7.00	3.3	28.7	7.45	3.0	38.5	6.40	3.8	21
Waiters'/Waitresses' assistants	4.58	5.3	18.7	5.24	11.6	36.3	4.42	5.7	16
Food preparation, n.e.c.	6.32	2.7	27.4	7.00	3.5	38.8	5.69	1.6	21
Health service	8.00	1.1	32.7	8.07	1.2	38.5	7.73	2.0	

Table 4. Selected occupations, East North Central, private industry: Mean hourly earnings1 for full-time and part-time workers,2 National Compensation Survey, 3 1997-Continued

		Total		F	Full time		F	Part time	
0	Hourly e	arnings		Hourly ea	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Service –Continued Health service –Continued									
Health aides, except nursing	\$8.72	2.2	33.4	\$8.81	2.4	37.7	\$8.14	6.9	18.8
Nursing aides, orderlies and attendants	7.73	1.2	32.5	7.76	1.2	38.8	7.64	1.9	21.2
Cleaning and building service	8.65	2.2	32.9	9.29	2.0	39.4	6.40	2.5	21.0
Supervisors, cleaning and building service									
workers	12.05	5.0	40.0	12.08	5.1	40.2	_	_	-
Maids and housemen	6.37	1.6	31.3	6.44	2.1	38.7	6.21	2.0	21.1
Janitors and cleaners	9.02	2.5	33.0	9.75	2.1	39.5	6.46	3.0	20.9
Personal service	8.73	4.4	27.2	9.78	5.6	36.6	6.58	2.1	17.8
Supervisors, personal service	11.69	9.6	39.3	11.70	9.7	39.7	_	_	_
Hairdressers and cosmetologists	9.73	11.2	36.9	10.12	11.6	39.5	_	_	_
Attendants, amusement, and recreation									
facilities	5.76	2.8	16.5	_	_	_	5.64	3.4	13.6
Ushers	6.22	5.8	17.0	_	_	_	6.22	5.8	17.0
Public transportation attendants	34.40	3.5	17.8	_	_	_	_	_	_
Baggage porters and bellhops	9.09	19.0	36.6	8.99	22.7	40.0	_	_	_
Welfare service aides	6.96	3.4	29.1	7.30	3.4	39.0	6.14	5.4	18.2
Early childhood teachers' assistants	6.25	5.0	25.6	6.30	6.5	39.5	6.17	3.1	15.8
Child care workers, n.e.c.	8.10	4.4	27.8	8.65	6.2	39.1	7.18	4.6	18.7
Service, n.e.c.	7.62	2.5	27.3	8.36	3.1	38.9	6.46	3.4	18.5

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

All workers include full-time and part-time workers. Employees are classified as working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered. a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule. $^3\,$ In this census division, collection was conducted between October 1996 and May

^{1998.} The average reference period was August 1997.

4 A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

5 The relative standard error (RSE) is the standard error expressed as a percent of the

⁵ The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see Technical Note.

Table 5. Selected occupations, East North Central, State and local government: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997

		Total		l	Full time		ı	Part time	
	Hourly e	earnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mear weekl hours
All	\$18.51	1.3	35.8	\$19.02	1.4	38.5	\$11.55	2.8	18.3
All excluding sales	18.52	1.3	35.8	19.02	1.4	38.5	11.58	2.8	18.3
White collar	21.26 21.29	1.2 1.2	35.7 35.8	21.66 21.68	1.3 1.3	37.8 37.8	14.03 14.14	3.6 3.7	18.1 18.1
Professional specialty and technical	25.66	1.4	35.0	26.08	1.5	37.0	17.53	4.0	17.1
Professional specialty	26.53	1.6	34.8	26.99	1.6	36.8	17.81	4.1	16.8
Engineers, architects, and surveyors	24.04	3.0	39.4	24.05	3.0	39.4	_	-	-
Civil engineers	25.72	5.6	38.6	25.72	5.6	38.6	_	_	_
Mathematical and computer scientists Computer systems analysts and scientists	22.32 21.79	7.3 7.9	38.7 38.6	22.42 21.89	7.3 7.9	39.1 39.0	_	_	
Natural scientists	16.22	9.7	39.1	16.27	10.0	39.5	_	I _	_
Biological and life scientists	19.76	5.7	32.8	-	-	-	_	_	_
Health related	22.14	4.4	36.7	22.42	4.8	39.1	18.48	5.7	20.6
Physicians	37.16	13.3	42.5	37.16	13.3	42.5	_	_	-
Registered nurses	19.10	4.9	35.9	19.06	5.4	38.6	19.61	4.1	20.2
Dietitians	17.43	1.6	38.6	17.43	1.6	40.0	_	_	-
Speech therapists	29.58	6.3	34.0	30.69	6.7	36.9	_	-	_
Therapists, n.e.c.	15.17	8.3 3.6	37.1 32.7	15.36	8.9	39.1	21.00	- 20	14.5
Teachers, college and university Biological science teachers	33.35 34.42	14.1	34.0	34.42	3.9	37.2	21.99	3.8	14.2
Chemistry teachers	31.46	8.7	28.6	_	_	_	_	_	_
Social science teachers, n.e.c.	30.27	9.8	38.8	30.27	9.8	38.8	_	_	_
Engineering teachers	50.07	19.2	40.0	50.09	19.2	40.3	_	_	-
Mathematical science teachers	39.18	2.1	33.3	-	_	_	_	_	-
Health specialities teachers	27.46	10.0	35.0	27.52	10.3	37.9	25.64	7.0	10.3
Business, commerce, and marketing teachers	36.72	17.5	26.6	_	_	_	_	_	_
Art, drama, and music teachers	27.65	11.8	38.3	27.06	-	27.6	_	_	_
Education teachers English teachers	37.96 32.48	6.3 9.5	37.6 37.4	37.96 32.62	6.3 9.5	37.6 38.7	_	_	_
Teachers, post secondary, subject not specified	30.46	12.9	23.1	-		-	22.73	12.5	11.2
Teachers, post secondary, n.e.c.	29.40	6.4	26.3	31.61	7.4	32.9	22.51	3.5	16.2
Teachers, except college and university	28.28	1.8	33.9	28.85	1.9	35.8	16.88	7.3	16.5
Prekindergarten and kindergarten	29.78	6.7	32.9	30.03	7.0	34.7		I	
Elementary school teachers	29.17	2.3	35.0	29.30	2.3	35.6	23.87	13.1	21.0
Secondary school teachers	29.78	2.9	36.1	29.84	3.0	36.4	22.93	17.9	17.4
Teachers, special education Teachers, n.e.c	28.15 28.78	4.9 4.8	36.0 30.8	28.39 29.86	4.9 4.8	36.1 35.0	_ 17.79	7.8	13.8
Substitute teachers	10.09	7.4	19.4	29.00		- 33.0	10.23	5.0	15.2
Vocational and educational counselors	20.69	9.3	36.5	21.15	9.9	38.5	-	-	-
Librarians, archivists, and curators	20.90	9.3	35.6	21.32	9.8	38.5	16.22	9.8	19.5
Librarians	22.10	8.8	35.7	22.68	8.9	38.8	15.82	11.7	19.4
Social scientists and urban planners	22.81	13.4	39.1	22.81	13.4	39.1	_	_	-
Psychologists	31.44	11.0	38.2	31.44	11.0	38.2	_	_	_
Urban planners	19.28 17.07	2.4 4.0	39.9 38.0	19.28 17.19	2.4 4.1	39.9 38.8	_ 12.41	10.0	22.0
Social, recreation, and religious workers Social workers	17.07	4.0	38.3	17.19	4.1	38.8	12.41	10.0	22.0
Recreation workers	11.78	11.2	35.2	12.07	12.6	38.6	10.42	14.2	24.8
Lawyers and judges	27.23	5.5	35.7	27.38	6.1	39.0	25.66	8.0	18.7
Lawyers	27.65	6.0	36.1	27.88	6.7	38.9	25.22	8.8	20.6
Writers, authors, entertainers, athletes, and									
professionals, n.e.c.	24.82	6.6	36.2	25.63	8.6	39.7	11.78	19.9	14.9
Public relations specialists	20.60	12.2	39.0	20.93	12.3	39.6	_	_	-
Athletes	28.54 26.11	9.8 19.9	35.0	_	_	_	_	_	_
Professional, n.e.c Technical	15.52	4.6	36.1 37.8	_ 15.60	4.8	39.1	13.42	5.0	21.2
Clinical laboratory technologists and	10.02	1.0	57.5	10.00	1.0	55.1	10.72	3.0	
technicians	10.10	6.5	38.9	10.06	6.5	40.0	_	_	-
Radiological technicians	14.30	5.2	32.5	14.54	5.9	39.6	_	_	-
Licensed practical nurses	12.43	3.3	36.8	12.24	3.8	39.9	13.68	5.9	24.5
Health technologists and technicians, n.e.c	14.87	11.1	37.7	15.04	11.3	40.4	_	-	-
Electrical and electronic technicians	13.57	2.1	38.9	13.59	2.2	39.5	-	-	_
Engineering technicians, n.e.c.	19.18	7.4	37.4	19.31	7.2	37.9	_	-	_
Surveying and mapping technicians	14.71	13.0	38.3	14.71	13.0	38.3	_	_	-

Table 5. Selected occupations, East North Central, State and local government: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time			Part time	
,	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hour
White collar –Continued									
Professional specialty and technical –Continued									
Technical –Continued									
Computer programmers	\$20.09	9.6	38.0	\$20.18	10.4	39.7	-		-
Technical and related, n.e.c.	16.36	9.7	38.3	16.43	9.9	38.8	\$12.50	5.4	21
Executive, administrative, and managerial	24.47	1.8	37.9	24.50	1.9	39.4	22.93	17.5	12
Executives, administrators, and managers	28.15	2.1	37.2	28.26	2.0	39.5	23.33	22.1	10
Legislators	23.18	33.2	5.5	_	-	-	23.27	36.6	5
Administrators and officials, public	25.33	3.8	38.6	25.38	3.6	39.7			
administration	23.74	3.8	39.9	23.74	3.8	39.7	_	-	
Administrators, education and related fields	33.20	3.4	38.7	33.19	3.4	39.1	_	_	-
Managers, medicine and health	31.47	20.0	39.2	31.47	20.0	39.2	_	_	-
Managers, service organizations, n.e.c	17.78	8.9	36.2	18.16	9.0	39.5	_	-	-
Managers and administrators, n.e.c	27.20	6.4	40.0	27.22	6.4	40.0	_	-	-
Management related	18.57	2.5	39.0	18.53	2.6	39.3	_	-	-
Accountants and auditors	20.01	5.8	38.9	20.01	5.8	38.9	_	_	-
Other financial officers Personnel, training, and labor relations	20.15	5.9	39.9	20.15	5.9	39.9	_	_	-
specialists	18.40	6.4	38.8	18.45	6.5	39.5	_	_	١ ـ
Construction inspectors	18.44	7.7	39.3	18.47	7.9	39.5	_	_	-
Inspectors and compliance officers, except									
construction	16.13	4.1	39.2	16.13	4.1	39.2	_	-	-
Management related, n.e.c.	19.69	5.1	38.6	19.66	5.2	38.8	_	-	-
Sales	12.58 11.26	9.9 11.6	28.6 26.6	14.25 12.59	11.2 13.5	40.0 40.0	7.74 8.07	14.9 16.1	15 14
Odolile13	11.20	11.0		12.00		40.0	0.07		'
Administrative support, including clerical	11.61 15.59	1.6 2.7	36.3 39.4	11.83 15.60	1.7 2.7	38.4 39.4	8.80	2.4	21
Supervisors, distribution, scheduling, and	15.59	2.7	33.4	15.00	2.7	33.4		_	
adjusting clerks	15.12	5.1	37.7	15.12	5.1	37.7	_	_	-
Computer operators	14.70	8.7	39.0	14.71	8.7	39.1	_	-	-
Secretaries	11.80	1.7	37.8	11.84	1.8	39.0	10.51	8.9	20
Stenographers	14.42	3.2	36.4	14.42	3.2	36.4	_	-	-
Typists	10.22	4.3	36.9	10.34	4.8	39.7	_	-	-
InterviewersReceptionists	11.90 11.99	10.3 8.2	33.7 31.0	12.30 13.01	9.9 5.9	40.0 38.3	7.03	3.2	16
Personnel clerks, except payroll and	11.99	0.2	31.0	13.01	3.9	30.3	7.03	3.2	'
timekeeping	13.59	11.5	39.0	13.59	11.5	39.0	_	_	
Library clerks	9.32	4.4	28.0	9.85	6.6	37.8	7.92	6.9	16
Records clerks, n.e.c	12.23	8.5	38.3	12.29	8.5	38.7	_	-	-
Bookkeepers, accounting and auditing clerks	11.94	2.3	38.4	12.06	2.4	39.1	9.04	2.8	27
Payroll and timekeeping clerks	15.92	5.2	38.5	15.92	5.2	38.5	_	-	-
Billing clerks	11.58	4.4	38.6	11.60	4.5	39.2	- 7.76	7.4	25
Dispatchers Stock and inventory clerks	10.88 12.22	8.1 3.5	36.9 38.1	11.41 12.28	9.4 3.6	40.0 38.3	7.76	7.4	25
Investigators and adjusters, except insurance	13.81	4.6	34.9	14.12	4.8	40.0	_	_	-
Eligibility clerks, social welfare	13.60	5.5	38.4	14.13	4.6	40.0	_	_	-
General office clerks	11.43	2.3	37.5	11.58	2.3	38.9	8.64	7.1	22
Data entry keyers	10.84	4.1	38.4	10.84	4.1	38.4	- .		l
Teachers' aides	9.41	3.5	31.5	9.50	4.1	34.6	8.95	3.2	21
Administrative support, n.e.c.	11.31	6.8	35.8	11.61	7.3	38.5	8.43	8.4	21
Blue collar	14.46	1.3	36.4	14.85	1.4	39.3	10.86	3.0	21
Precision production, craft, and repair	16.39	1.8	39.4	16.42	1.8	39.7	_	-	-
Supervisors, mechanics and repairers	18.09	8.8	39.9	18.09	8.8	39.9	-	-	-
Automobile mechanics	15.70	3.2	40.0	15.70	3.2	40.0	_	-	-
Bus, truck, and stationary engine mechanics Heavy equipment mechanics	16.23 14.59	3.6 10.2	40.0 40.0	16.23 14.59	3.6 10.2	40.0 40.0	_	_	-
Mechanical controls and valve repairers	14.59	7.6	35.8	15.11	7.1	39.4	_	_	1 -
iviechanical controls and valve repairers	14.57	0.1	35.8	15.11	7.1	39.4	_	_	

Table 5. Selected occupations, East North Central, State and local government: Mean hourly earnings¹ and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997–Continued

		Total			Full time		F	Part time	
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
Blue collar -Continued									
Precision production, craft, and repair -Continued									
Mechanics and repairers, n.e.c	\$15.36	3.8	40.0	\$15.36	3.8	40.0	_	_	-
Supervisors, construction trades, n.e.c	17.94	4.3	39.6	17.94	4.3	39.6	_	-	-
Carpenters	18.02	14.5	40.0	18.02	14.5	40.0	_	-	-
Electricians	18.67	7.9	39.8	18.67	7.9	39.8	_	_	-
Painters, construction and maintenance	16.69	6.2	39.9	16.69	6.2	39.9	_	_	-
Plumbers, pipefitters and steamfitters	17.85	6.5	39.7	17.85	6.5	39.7	_	-	-
Construction trades, n.e.c.	14.42	7.4	39.2	14.43	7.4	39.3	_	_	'
Water and sewer treatment plant operators	15.31 18.83	2.8 8.5	40.0	15.31 18.83	2.8 8.5	40.0 39.1	_	_	
Stationary engineers	10.03	0.5	39.1	10.03	0.5	39.1	_	_	
Machine operators, assemblers, and inspectors Laundering and dry cleaning machine operators	11.90 8.91	7.8 5.7	39.5 40.0	11.93 8.91	7.9 5.7	40.0 40.0	_ _	_	-
Towns and the second and the standard and the second	40.70		20.0	44.00		20.4	¢44.00	0.4	
Transportation and material moving	13.70 19.10	2.2 8.2	32.0 39.5	14.23 19.10	2.3 8.2	38.1 39.5	\$11.98	3.1	2
Truck drivers	19.10	4.0	39.5	13.32	4.1	40.0	_	_	
Bus drivers	13.19	2.5	27.7	14.20	2.4	35.8	12.07	3.2	2
Operating engineers	16.12	9.4	40.0	16.12	9.4	40.0	12.07	3.2	-
Miscellaneous material moving equipment	10.12	3.4	40.0	10.12	3.4	40.0			
operators, n.e.c.	14.88	8.8	40.0	14.88	8.8	40.0	-	_	
Handlers, equipment cleaners, helpers, and									
laborers	12.25	3.3	37.8	12.78	3.9	39.6	6.95	5.0	26
Groundskeepers and gardeners, except farm	11.74	5.3	35.8	12.97	4.2	39.4	6.45	4.2	2
Helpers, mechanics and repairers	13.88	7.1	33.9	14.80	4.4	40.0	_	_	
Construction laborers	13.53	6.6	40.0	13.53	6.6	40.0	_	-	
Garbage collectors Laborers, except construction, n.e.c	11.97 10.46	17.1 4.9	39.3 38.8	- 10.68	5.1	40.0	- 6.85	6.5	20
ervice	13.40	2.4	35.6	13.92	2.6	40.1	8.29	2.3	1
Protective service	16.91	1.9	39.1	17.21	1.9	41.7	8.92	4.8	1.
Supervisors, firefighters and fire prevention	17.29 23.75	4.1 5.8	50.7 40.0	17.29 23.75	4.1 5.8	51.0 40.0	_	_	
Supervisors, police and detectives Supervisors, guards	16.51	13.1	37.0	16.51	13.1	37.0	_	_	
Firefighting	15.49	3.6	44.6	15.71	3.4	50.3	8.82	7.4	1
Police and detectives, public service	19.31	2.5	39.3	19.37	2.4	39.8	0.02		'
Sheriffs, bailiffs, and other law enforcement									
officers	14.41	3.9	39.6	14.44	3.9	39.8	_	_	
Correctional institution officers	13.63	4.1	38.5	13.73	4.1	39.2	-		١,
Crossing guards Guards and police, except public service	6.88	11.4	13.2				6.88	11.4	1:
	13.77	5.8	31.3	13.89	6.5	38.5	13.14	11.8	1
Protective service, n.e.c.	11.01	14.1	29.4	12.22	15.7	39.2	7.28	6.7	1
Food service	8.94 10.27	2.9 7.1	29.0 33.9	9.10 10.31	3.9	35.7 34.9	8.44 _	3.5	1
Cooks	9.57	2.3	32.5	9.50	7.5 2.5	35.4	9.96	5.1	2
Food counter, fountain, and related	6.34	7.6	11.3	9.50		- 35.4	6.34	7.6	1
Kitchen workers, food preparation	6.94	3.8	34.4	_	_	_	- 0.04		١.
Food preparation, n.e.c.	8.46	4.0	24.0	8.77	6.2	35.7	8.10	3.9	1
Health service	10.32	6.1	36.2	10.36	6.5	38.6	9.77	6.3	18
Health aides, except nursing	11.78	1.3	35.9	11.84	1.5	38.8	11.10	3.3	2
Nursing aides, orderlies and attendants	9.49	8.7	36.4	9.55	9.2	38.6	8.48	7.0	1
Cleaning and building service	10.96	2.2	38.2	11.08	2.3	39.6	8.95	8.4	2
workers	14.07	8.6	40.2	14.07	8.6	40.2	_	_	
Maids and housemen	7.97	4.6	33.6	_	_	-	_	_	
Janitors and cleaners	10.80	2.2	38.1	10.92	2.3	39.6	8.96	8.5	2
Personal service	9.29	4.8	26.2	10.20	5.9	37.5	7.45	3.1	10
facilities	6.35	2.2	24.5	_	-	_	6.59	2.2	2
Welfare service aides	8.16	22.0	32.7	8.17	22.6	37.8	_	-	-

Table 5. Selected occupations, East North Central, State and local government: Mean hourly earnings1 and weekly hours for full-time and part-time workers,² National Compensation Survey,³ 1997-Continued

		Total		F	-ull time		F		
0	Hourly ea	arnings		Hourly ea	arnings		Hourly earnings		
Occupation ⁴	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Service –Continued Personal service –Continued Early childhood teachers' assistants Child care workers, n.e.c. Service, n.e.c.	\$8.90 9.22 10.72	3.5 5.7 6.4	30.4 21.6 26.3	\$9.08 10.62 11.40	4.5 6.9 5.9	36.0 38.9 37.4	\$8.44 7.41 7.18	5.0 4.6 7.4	21.7 13.7 10.3

¹ Earnings are the straight-time hourly wages or salaries paid to employees. They Earnings are the straight-time nouny wages or salaries paid to employees. Inely include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

2 All workers include full-time and part-time workers. Employees are classified as well as the open part time appendix to the properties of the page to a part time appendix to the page to the page to a part time and part-time.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria, and n.e.c. means "not elsewhere classified." Overall occupational groups may include data for categories not shown separately.

working either a full-time or a part-time schedule based on the definition used by each establishment. Therefore, a worker with a 35-hour-per-week schedule might be considered a full-time employee in one establishment, but classified as part-time in another firm, where a 40-hour week is the minimum full-time schedule. $^3\,$ In this census division, collection was conducted between October 1996 and May

^{1998.} The average reference period was August 1997.

⁴ A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

⁵ The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see Technical Note.

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997

		Total		Priv	ate industry		State and	local gover	nment
	Hourly	earnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea weel hou
I	\$15.45	0.9	36.2	\$14.85	1.0	36.3	\$18.51	1.3	35.
All excluding sales	15.52	.8	36.5	14.89	.9	36.6	18.52	1.3	35.
White collar	18.92	1.1	36.4	18.28	1.4	36.5	21.26	1.2	35.
1		1.4	26.1	6.61	1.4	26.3	6.84	3.2	23.
2 3		1.5 1.0	30.0 34.1	8.32 9.04	1.6 1.3	29.8 34.0	8.72 10.21	3.1 1.5	31.
4		1.0	37.0	10.95	1.3	36.9	11.31	3.6	37
5		1.9	36.9	13.08	2.1	37.3	12.62	2.9	35
6		1.7	37.7	14.53	1.4	38.1	15.75	5.1	36
7		1.1	37.6	16.90	1.1	37.9	19.52	2.3	36
8		1.7	36.7	18.66	1.7	37.2	24.40	3.5	35
9		.8	37.0	21.75	1.1	37.9	27.43	1.5	35
10 11		2.1 1.4	38.9 38.7	26.48 30.59	2.4 1.6	39.3 39.0	24.30 29.08	3.2 2.1	36
12		1.1	40.2	34.61	1.2	40.5	32.87	2.5	38
13		5.5	39.9	50.17	6.8	40.3	39.29	4.2	38
14	51.15	3.5	41.3	51.30	3.8	41.8	49.32	8.8	36
15		7.2	41.3	67.82	7.5	41.8			l
Not able to be leveled		4.4	35.8	27.09	5.0	36.9	27.37	9.2	31
White collar excluding sales		1.0 1.8	37.0 29.5	18.92 7.32	1.3	37.4 30.5	21.29 6.92	1.2 3.3	35 24
1 2		1.7	32.2	8.65	1.9	32.4	8.59	2.9	31
3		1.0	35.7	9.46	1.2	35.9	10.18	1.4	34
4		1.1	37.6	11.07	1.1	37.6	11.31	3.6	37
5	12.72	1.4	36.6	12.74	1.5	37.1	12.62	2.9	35
6		1.7	37.6	14.51	1.3	38.0	15.75	5.1	36
7		1.1	37.4	16.59	.9	37.6	19.52	2.3	36
8 9		1.7	36.4 36.9	18.25 21.61	1.2	36.8 37.9	24.41 27.44	3.5 1.5	35 35
10		1.9	38.8	25.64	2.1	39.2	24.30	3.2	36
11		1.3	38.5	30.29	1.6	38.8	29.08	2.1	37
12	34.08	1.1	40.2	34.33	1.2	40.5	32.87	2.5	38
13		2.4	39.9	47.06	3.0	40.3	39.29	4.2	38
14		3.5	41.3	51.34	3.8	41.8	49.32	8.8	36
15 Not able to be leveled		7.2 4.5	41.3 35.6	67.82 28.15	7.5 5.1	41.8 36.8	_ 27.37	9.2	31
Professional specialty and technical	22.99	1.0	35.8	21.66	1.4	36.2	25.66	1.4	35
Professional specialty		1.1	35.7	23.37	1.5	36.3	26.53	1.6	34
4		8.5	24.2	10.87	12.6	22.7	8.04	6.2	26
5		5.1	32.2	11.14	4.9	33.6	12.00	8.3	31
6 7		5.9 1.9	34.2 35.5	13.47 16.94	3.8 1.6	35.0 35.6	20.55 21.97	9.9	33
8		2.5	33.7	18.90	1.8	33.5	26.41	4.0	33
9	24.83	1.0	35.5	21.08	1.6	36.2	28.41	1.5	34
10		2.6	37.8	24.27	3.1	38.3	23.54	6.5	35
11		1.2	38.0	28.92	1.4	38.5	27.67	3.3	36
12		2.0	39.9	34.44	2.3	40.3	33.26	3.4	38
13		4.9	38.9	43.15	7.4	39.0	38.15	5.4	38
14 15		8.3 8.3	40.3 42.6	50.38 64.09	9.6 8.3	41.5 45.7	58.44	9.6	32
Not able to be leveled		5.7	35.8	25.44	5.9	35.7	30.48	12.8	36
Engineers, architects, and surveyors	27.10	1.5	40.3	27.25	1.5	40.4	24.04	3.0	39
5		2.9	40.0	17.99	2.9	40.0	_	-	-
6		2.9	40.0	18.51	2.9	40.0	_	-	-
7		4.0	39.9	19.63	4.0	40.0	_	_	-
8 9		2.5 1.9	40.1 40.3	20.38 23.07	2.2 1.9	40.1 40.3	22.43	6.9	39
10		2.5	40.3	25.79	2.4	40.3	-	- 0.9	5
11		2.0	40.3	29.35	2.0	40.4	24.57	3.1	39
12		2.9	40.9	32.02	2.9	40.9	_	-	-
13		4.4	40.0	37.43	4.4	40.0	-	-	-
Not able to be leveled		10.2	40.6	29.63	10.2	40.6	-		
Mathematical and computer scientists	27.55	3.1	39.7	27.84	3.1	39.8	22.32	7.3	38

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Priv	ate industry		State and	local gover	nmen
	Hourly e	arnings		Hourly e	arnings		Hourly e	arnings	
Occupational group and level	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea wee hou
nite collar -Continued									
ite conai -continued									
Professional specialty and technical -Continued									
Professional specialty –Continued Methomstical and computer acceptate. Continued									
Mathematical and computer scientists –Continued 6	\$17.17	5.1	38.2	\$17.50	4.9	38.8	_	_	_
7	18.93	3.8	39.5	18.63	3.9	39.5	_	_	
8	21.15	8.5	39.8	21.84	10.1	40.4	_	_	-
9	25.02	1.9	39.4	25.09	1.9	39.4	_	_	-
10	26.35	4.0	41.3	26.35	4.1	41.4	-	-	
11	31.06	4.5	39.8	31.26	4.5	39.7	_	_	
12	35.80	5.5	40.0	35.85	5.7	40.0	_	-	
Not able to be leveled	32.11	16.6	39.9	32.11	16.6	39.9	_ 	- 0.7	2
Natural scientists	23.33 13.82	8.0 5.1	38.9 40.0	25.49	9.4	38.9	\$16.22 —	9.7	39
6	17.10	4.4	39.7	16.99	4.5	39.7	_		
8	20.47	14.7	40.2	23.47	10.2	41.3	_	_	
9	21.72	3.6	39.8	22.74	3.8	39.7	20.46	3.5	4
11	29.37	3.3	40.0	29.54	3.3	40.0	_	_	-
12	36.57	6.4	39.3	36.57	6.4	39.3	_	_	
13	25.24	25.8	38.6	-	-	-	_	-	
Health related	21.51	1.4	32.9	21.39	1.3	32.2	22.14	4.4	3
5	12.25	3.5	29.1	12.73	6.8	26.2		<u> </u>	
<u>6</u>	16.84	3.4	31.4	17.28	2.9	30.3	14.75	4.4	3
7	17.47	3.7	32.5	17.85	2.4	31.4	15.88	9.5	3
8	18.99 19.89	1.4	31.6 33.6	18.82 19.30	1.2	31.1 33.0	20.17 23.34	5.7 4.1	3
9 10	22.43	6.4	36.6	23.77	5.9	35.5	23.34 18.14	14.0	4
11	24.96	4.5	32.2	25.77	4.7	32.7	22.89	4.4	2
12	51.11	9.5	37.0	51.11	9.5	37.0	_		_
13	52.70	12.6	35.0	69.09	9.8	27.6	_	_	
Not able to be leveled	26.27	12.3	35.9	26.82	12.9	35.5	_	_	
Teachers, college and university	32.76	3.4	33.8	31.57	6.3	36.5	33.35	3.6	3
7	17.57	6.8	28.6	-	_	-	15.29	5.2	2
8	29.71	11.9	17.5	-		-	29.64	12.4	1
9	26.24	9.0	24.2	23.01	6.6	22.6	26.78	10.6	2
10 11	21.03 27.12	7.3 4.4	30.4 34.8	19.72 24.64	4.4 4.2	32.1 35.1	33.52 28.93	5.5 5.7	3
12	33.89	3.7	38.1	33.00	6.2	38.9	34.24	4.0	3
13	38.08	1.7	41.0	41.10	4.1	45.6	36.97	1.5	3
14	54.19	6.4	38.8	49.46	2.2	48.2	58.77	9.8	3
Not able to be leveled	34.23	25.3	36.9	_	_	-	_	_	
Teachers, except college and university	26.71	1.6	33.6	15.36	3.5	31.4	28.28	1.8	3
4	7.86	8.3	20.6	_	-	-	8.62	15.8	2
5	10.50	17.0	27.5	7.60	9.5	30.8	13.25	17.8	2
6	21.10	11.1	30.0	11.31	5.3	29.9	24.98	12.1	3
7	23.36	4.6	34.6	17.13	9.9	35.5	24.31	5.4	3
8	29.66 28.99	4.4 1.6	32.7	15.86	2.3 2.7	29.7	31.26	4.3 1.7	3
9 10	34.32	11.4	35.0 38.1	20.20 22.53	9.8	34.7 32.6	29.64	1.7	3
11	30.09	9.1	36.2	_	9.0	-	32.35	8.2	34
Librarians, archivists, and curators	19.51	7.0	34.6	17.08	4.6	33.0	20.90	9.3	3
5	11.19	1.0	34.7	11.05	2.5	36.6	-	_	
6	12.18	6.4	34.8	_	-	-	12.92	4.7	34
7	14.34	4.1	36.3	-	-	-	14.80	4.6	3
8	19.30	14.8	35.9				20.26	16.2	3
9	20.81	6.2	30.8	18.87	6.0	26.1	22.16	8.6	3
10	18.10	5.4	38.1	-	_	-	18.64	8.5	3
11	25.72 21.45	12.5	37.8	_ 10.01	1 8	- 36.3	28.17	8.6	3.
Social scientists and urban planners	21.45 17.79	7.5 7.7	37.7 39.5	19.91	4.8	36.3	22.81	13.4	3
8	18.32	4.3	39.5	16.00	4.9	39.8	_	_	
9	23.70	8.9	38.0	19.26	10.2	37.2	26.88	10.2	38
10	20.02	5.1	38.8	19.75	6.0	38.5	-	1 -5.2	".

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

			Total		Priv	ate industry		State and	local gover	nment
		Hourly e	arnings		Hourly e	arnings		Hourly ea	arnings	
	Occupational group and level	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mea week hou
'hite collar -	-Continued									
	al specialty and technical -Continued									
	nal specialty –Continued scientists and urban planners –Continued									
	1	\$32.82	9.9	33.2	- ¢12.00	- 10	- 27.6	- \$17.07	-	38.
	religious, and recreation workers	14.91 7.53	2.6 4.1	37.8 32.2	\$13.09 —	1.8	37.6	\$17.07 —	4.0	38
		11.38	3.7	38.1	10.10	9.7	37.9	11.64	3.9	38
		12.56	8.4	38.6	9.93	4.8	38.9	15.69	5.1	38
7		13.56	1.9	37.5	12.90	2.3	37.5	15.23	2.2	37
		15.66	4.2	38.1	13.22	5.5	37.8	16.89	3.4	38
		16.43	3.3	38.2	15.20	4.0	37.4	18.77	4.7	39
	0	18.81	11.3	36.2	15.53	10.8	35.9	24.56	9.7	36
	1	24.86	16.2	36.0	16.11	5.5	37.4	34.19	10.6	34
	rs and judges 0	37.29 29.84	13.8 13.5	38.0 33.4	46.90	16.6	40.6	27.23	5.5	35
	1	26.32	10.2	38.6	_	1 _	_	22.55	5.3	37
	2	30.77	5.0	40.0	31.10	6.7	41.1	30.06	6.5	37
	3	57.32	16.7	36.3	65.50	20.4	38.6	_	_	-
	s, authors, entertainers, athletes, and									
•	ssionals, n.e.c	20.45	4.8	38.4	19.84	5.3	38.8	24.82	6.6	36
		13.04	8.4	38.0	13.08	8.6	38.0	_	_	-
		12.97	10.8	39.0	13.02	11.2	39.2	-	-	.:
		17.66	4.6	39.5	17.18	3.3	39.5	22.13	23.7	40
		17.93 20.61	2.2 4.4	39.6 38.3	18.25 20.73	1.4 4.6	39.7 39.3	_	_	-
	0	25.38	12.7	40.5	27.52	14.1	40.6	_	_	
	1	26.24	4.6	39.7	26.75	4.1	39.6	_	_	
	2	28.91	7.1	42.6	28.91	7.1	42.6	_	_	-
	ot able to be leveled	23.31	7.9	35.6	21.06	11.5	35.5	28.85	7.6	35
	l	17.28	2.0	36.1	17.51	2.2	35.9	15.52	4.6	37
		8.74	12.0	38.6	8.75	12.3	38.9	_	-	-
		9.52	3.9	30.7	9.56	4.2	30.2	-		20
		11.51 12.56	2.3 2.3	36.0 34.4	11.39 12.78	2.5 2.5	35.9 34.0	12.86 11.25	4.9 3.8	36
		14.67	1.8	36.6	14.93	1.9	36.5	12.26	10.2	37
		16.95	2.1	36.6	17.04	2.4	36.3	16.36	2.7	38
		19.96	1.9	38.1	20.08	2.2	38.0	18.83	4.4	38
		22.33	2.6	38.9	22.66	3.1	39.1	21.11	1.6	38
10	0	29.00	11.8	38.2	29.76	13.0	38.5	_	_	-
	1	48.28	15.0	32.8	48.28	15.0	32.8	_	-	-
N	ot able to be leveled	15.81	12.0	30.6	15.72	13.5	29.7	_	_	-
Executive.	administrative, and managerial	26.88	1.1	39.9	27.33	1.3	40.3	24.47	1.8	37
		13.39	2.7	38.5	13.47	2.9	39.0	12.91	8.2	36
		15.02	2.7	39.7	15.05	3.0	40.1	14.90	5.1	37
7		16.11	1.4	40.2	16.22	1.8	40.4	15.78	2.1	39
		17.06	1.7	40.1	16.81	1.8	40.2	18.56	3.7	39
		22.17	1.3	39.9	22.18	1.5	40.1	22.13	2.3	39
	0	26.36	2.2 1.2	39.8	26.53	2.4	40.1	25.29	3.3	37
	1 2	29.96 33.88	1.2	39.8 40.5	29.77 34.12	1.3 1.5	40.1 40.7	30.86 32.61	2.3 4.5	38
	3	33.00 47.24	2.2	41.3	34.12 47.77	2.5	41.5	43.04	7.2	39
	4	51.13	3.3	41.7	51.77	3.6	41.9	41.96	3.9	39
	5	68.68	8.9	40.9	68.66	9.0	41.0	-	-	-
	ot able to be leveled	37.41	6.3	35.5	40.48	6.4	39.3	26.07	11.5	26
	tives, administrators, and managers	30.75	1.5	40.2	31.29	1.8	40.9	28.15	2.1	37
		11.90	7.0	35.5	12.08	10.4	37.5	-	-	-
		14.17	5.3	41.3	14.36	5.8	41.5	-		-
		15.44	2.5	42.0	15.15	3.6	43.0	16.05	3.2	39
		18.50	3.0	40.3	18.42	3.2	40.4	19.21	5.7	39
		22.14	1.8	40.2	21.94	2.2	40.5	23.11	3.3	38
10	0	27.06	2.8	40.1	27.12	3.0	40.2	26.36	5.4	38

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total			Private industry			State and local government		
Occupational group and level	Hourly 6	earnings		Hourly earnings			Hourly earnings			
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	
White collar -Continued										
Executive, administrative, and managerial -Continued										
Executives, administrators, and managers -Continued										
11		1.5	40.0	\$29.25	1.7	40.6	\$31.54	2.2	38.	
12		1.5 2.5	40.7 41.8	34.61 46.95	1.6	41.0 42.1	32.64 43.04	4.5 7.2	39	
13 14		3.5	41.9	52.50	3.7	42.1	43.04	3.9	39	
15		9.1	41.0	70.53	9.3	41.0	41.30	- 5.5	55	
Not able to be leveled		8.4	33.4	44.80	9.4	39.6	29.53	7.4	22	
Management related		1.1	39.5	22.03	1.2	39.6	18.57	2.5	39	
5		2.8	39.2	13.66	3.0	39.3	13.64	9.6	38	
6		3.1	39.3	15.22	3.5	39.7	15.32	5.1	37	
7		1.8	39.4	16.62	1.7	39.5	15.58	5.0	39	
8		7.8	40.0	15.86	8.6	40.0	18.34	8.3	39	
9		1.4	39.6	22.46	1.6	39.6	20.68	2.3	3	
10	24.76	2.4	39.2	24.82	3.0	39.8	24.61	3.6	3.	
11	30.48	7.2	39.3	30.83	7.2	39.3	-	_		
12	31.60	2.6	39.3	31.63	2.6	39.2	_	_		
14		8.4	40.0	44.46	8.4	40.0	_	-		
Not able to be leveled	31.94	16.9	39.1	34.63	13.5	38.9	-	_	-	
Sales		6.0	31.9	14.16	6.0	31.9	12.58	9.9	28	
1		1.4	24.1	6.18	1.4	24.3	5.86	6.0	13	
2		4.2	24.7	7.43	4.1	24.6	_ 11 FO	12.0	١,	
3		2.3 4.9	28.0	7.31 10.40	2.4 4.9	27.9 34.2	11.50	13.9	3	
4 5		8.6	34.2 38.6	14.79	8.6	38.6	_	-		
6		5.6	39.5	14.73	5.6	39.5	_	_		
7		5.9	41.2	20.13	5.9	41.2	_	_		
8		7.4	40.8	22.10	7.4	40.8	_	_		
9		4.6	40.1	25.14	4.6	40.1	_	_		
10		9.8	40.2	33.12	9.8	40.2	_	_		
11		7.3	40.7	34.25	7.3	40.7	_	_		
12	42.25	6.8	40.3	42.25	6.8	40.3	_	-		
Not able to be leveled	14.15	10.5	37.7	14.15	10.5	37.7	-	_		
Administrative support, including clerical		1.0	36.7	11.45	1.2	36.8	11.61	1.6	36	
1		1.8	29.5	7.32	2.0	30.5	6.92	3.3	2	
2 3		1.7 1.0	32.3 35.8	8.65 9.47	1.9 1.2	32.5 36.0	8.59 10.20	2.9 1.4	3	
4		1.2	38.0	11.05	1.2	38.0	11.33	3.7	3.	
5	40.04	1.8	38.2	12.83	2.0	38.4	13.32	2.4	3	
6		1.2	39.2	14.46	1.6	39.4	12.92	1.7	3	
7		1.1	39.2	16.11	1.3	39.2	16.08	1.5	3	
8		3.1	40.1	18.17	3.4	40.1	16.19	5.7	4	
9		7.2	38.7	20.93	7.7	38.6	_	-		
10	22.37	4.7	39.4	22.37	4.7	39.4	-	_		
11 Not able to be leveled		13.2	37.6	34.11	13.2	37.6	- 12.10	- 0.3	3	
Not able to be leveled		5.6	36.7	12.44	5.9	36.9	12.10	9.3	3	
ue collar		1.1	38.3	13.28	1.3	38.4	14.46	1.3	36	
1		2.0	33.2	7.87	2.0	33.2	9.01	6.4	34	
2		2.9	37.3	9.60	3.0	37.4	12.07	4.3	35	
3 4		2.6	38.6	13.03	2.7	38.9	11.96 13.50	2.7	32	
		1.5	39.7 39.4	12.96	1.6	39.9 39.7	13.59 14.50	2.2 2.3	33	
5 6		1.6 2.0	40.9	13.92 15.96	1.8	39.7 40.9	15.30	2.3	3	
7		.9	39.9	19.30	1.0	40.9	17.52	1.9	39	
8		1.9	40.6	21.41	2.0	40.0	20.01	7.6	39	
9		3.6	40.0	22.63	3.7	40.1	23.09	5.8	40	
		1 0.0	1 10.1	00	J 5.7	1 10.1	20.00	1 0.0	1 70	

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey,⁴ 1997—Continued

		Total		Private industry			State and local government		
Occupational group and level	Hourly earnings			Hourly earnings			Hourly earnings		
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Blue collar –Continued Not able to be leveled	\$13.77	9.3	38.7	\$13.83	10.2	38.6	-	_	-
Precision production, craft, and repair	17.20 8.19	1.2 15.4	39.9 39.2	17.28 8.19	1.3 15.4	39.9 39.2	\$16.39 —	1.8	39
2	8.42	9.5	38.2	8.41	9.5	38.2	_	_	-
3	11.17	3.5	39.3	11.00	3.7	39.2	-	l	l
4		5.3	39.9	13.25	5.5	40.0	12.03	14.1	39
5 6	14.14 16.18	2.0 3.3	39.8 39.9	14.05 16.22	2.0 3.6	40.0 40.0	14.72 15.72	5.3 3.4	38
7	19.28	.9	39.9	19.50	1.0	40.0	17.44	2.1	39
8	21.40	2.1	40.6	21.45	2.2	40.6	19.99	7.8	39
9	22.67	3.8	40.2	22.66	3.9	40.2	23.07	7.7	40
10	33.73	15.2	43.2	33.73	15.2	43.2	_	-	-
Not able to be leveled	16.08	10.4	40.0	16.50	14.3	40.0	-	_	-
$\label{eq:machine operators} \textbf{Machine operators, assemblers, and inspectors} \ \dots$	12.25	1.9	39.8	12.25	1.9	39.8	11.90	7.8	39
1	7.80	3.6	38.3	7.79	3.6	38.3	_	_	
2 3	9.42 13.42	2.8 3.2	39.7 39.9	9.42 13.43	2.8 3.2	39.7 39.9	_	-	
4	12.73	1.9	40.0	12.73	1.9	40.0	_	-	
5	13.00	1.9	40.0	13.00	1.9	40.0	_	_	
6	15.15	3.4	40.0	15.16	3.4	40.0	_	-	
7	17.05	2.7	39.9	17.11	2.7	39.9	_	-	
Not able to be leveled	19.35	7.4	40.0	19.35	7.4	40.0	-	-	
Not able to be leveled	11.29	21.9	38.3	11.29	21.9	38.3	_	_	-
Transportation and material moving	14.06 7.34	1.8 3.6	36.4 26.7	14.12 7.31	2.0 3.6	37.2 26.5	13.70	2.2	32
2	11.47	4.1	33.1	10.83	5.9	33.1	14.01	4.5	33
3	12.89	2.0	34.5	13.08	2.4	35.8	11.92	2.6	29
4	13.97	2.4	38.5	13.96	3.9	39.8	14.06	3.7	29
5	16.04	3.8	37.4	16.49	4.4	38.2	14.24	4.8	34
6	17.77	3.5	48.3	17.89	3.6	48.6	-	_	1 .
7 9	20.99 25.15	5.7 9.2	40.4 40.0	21.17 25.15	6.5 9.2	40.5 40.0	19.83 –	2.9	40
Handlers, equipment cleaners, helpers, and									
laborers	10.40	2.0	34.7	10.27	2.2	34.5	12.25	3.3	37
1	7.97 9.69	2.1 3.6	31.0 35.8	7.94 9.71	2.2 3.9	30.9 35.6	8.99 9.37	7.2 7.7	34
3	12.00	5.1	37.6	11.99	5.3	37.5	12.23	5.1	38
4	12.57	3.2	39.2	12.45	3.5	39.2	13.66	2.7	39
5	14.34	4.4	39.4	14.32	5.0	39.4	14.55	4.7	39
6	13.87	4.7	39.9	13.75	9.3	40.0	14.31	1.9	39
7 Not able to be leveled	17.40 12.82	10.0	38.9 37.6	17.14 12.82	3.5 10.0	38.2 37.6	17.78 –	2.8	40
	0.00	4.0	24.0	7.00		00.0	40.40	0.4	١.,
ervice	9.26 6.52	1.3	31.3 26.1	7.63 6.25	1.2 1.8	29.8 26.2	13.40 8.60	2.4 4.7	35
2	7.10	2.1	30.0	6.65	2.1	29.5	9.32	5.0	32
3		1.7	32.2	7.54	1.8	31.7	10.12	2.5	34
4		2.0	34.3	9.21	2.8	33.6	10.95	2.1	35
5	12.22	2.7	34.6	11.88	4.4	33.9	12.77	1.9	35
6	14.33	2.6	39.8	13.13	3.7	37.9	14.90	3.2	40
7 8	16.00 19.61	3.1	38.8 40.3	13.77 15.30	6.5	33.0 40.6	16.63 19.93	3.1 2.1	40
9	21.09	3.4	40.3	15.30	11.7	40.6	21.37	3.2	42
10		11.8	42.4	_	_	_	23.80	11.8	42
Not able to be leveled	10.75	7.6	33.6	9.61	4.4	34.4	15.44	16.5	30
Protective service	14.51	2.8	36.7	8.18	4.3	31.6	16.91	1.9	39
1		10.9	25.1	7.58	14.0	32.3	5.92	4.7	13
2		3.7	31.2	6.67	3.7	32.6	8.46	10.5	21
3	8.32	8.4	32.6	7.08	5.3	32.0	12.30	6.7	34

Table 6. Occupational groups¹ and levels,² East North Central: Mean hourly earnings³ and weekly hours, private industry and State and local government, National Compensation Survey, 4 1997-Continued

	Total			Private industry			State and local government		
Occupational group and level	Hourly e	arnings		Hourly earnings			Hourly earnings		
	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours	Mean	Relative error ⁵ (percent)	Mean weekly hours
Service –Continued									
Protective service –Continued									
4	\$9.69	7.7	34.1	\$8.92	12.8	34.0	\$10.64	4.6	34.3
5	12.46	3.6	34.4	10.02	5.9	27.9	13.17	3.2	36.8
6	15.37	3.4	40.5	16.17	5.6	33.9	15.32	3.7	41.0
7	16.61	3.1 2.1	39.2 40.4	16.59 —	5.4	18.9	16.62	3.3 2.1	40.8
8 9	20.05 21.40	3.1	40.4	_	-	_	20.05 21.37	3.2	40.4
10	23.80	11.8	42.1	_	_	_	23.80	11.8	42.4
Not able to be leveled	13.75	11.6	35.1	_		_	25.00	'	72.4
Food service	6.64	2.1	27.9	6.45	2.4	27.8	8.94	2.9	29.0
1	5.48	1.5	23.5	5.32	1.5	23.5	8.27	4.1	23.9
2	5.51	3.1	27.8	5.39	3.4	27.8	7.68	6.4	28.7
3	6.87	4.6	30.1	6.56	5.5	30.2	9.12	2.3	29.5
4	8.81	3.5	35.0	8.69	4.2	34.9	9.60	4.1	36.1
5	9.66	5.7	36.3	9.59	6.3	36.7	10.49	6.1	32.1
6	12.71	6.4	40.6	12.71	6.7	40.8	_	_	_
7	12.92	4.2	40.4	12.88	4.2	40.4	_	_	-
8	14.78	6.1	36.6	15.41	8.3	40.0	_	_	_
Health service	8.38	1.4	33.3	8.00	1.1	32.7	10.32	6.1	36.2
1	7.10	2.2	30.8	7.01	2.5	29.8	_	_	_
2	7.43	2.5	33.9	7.46	2.4	33.8	7.25	9.5	35.0
3	8.04	1.5	32.9	7.89	1.3	32.5	9.53	6.0	36.6
4	9.43	3.7	33.0	8.88	2.0	32.7	11.59	3.4	34.6
5	12.04	2.5	36.2	10.71	3.5	35.5	12.75	2.0	36.5
6	-	2.9	34.8	13.17	9.0	24.5	_	_	_
Not able to be leveled	8.74	3.4	37.6	8.74	3.4	37.6	-	_	-
Cleaning and building service	9.35	1.7	34.4	8.65	2.2	32.9	10.96	2.2	38.2
1	7.57 9.71	2.3 3.3	31.8 33.7	7.28 9.21	2.7 5.0	31.2 31.8	10.22 10.47	6.2 2.2	38.4
2	_	2.8	37.6	-	2.9	36.7		4.9	38.4
3 4	10.00 11.21	2.0	39.1	9.26 9.57	3.2	38.7	10.58 12.02	2.2	39.3
5	12.65	4.5	39.9	12.55	5.1	39.8	13.07	3.5	40.0
6	13.17	3.4	40.0	12.85	3.8	40.0	-	3.5	40.0
7	17.76	3.9	40.0	17.09	4.6	40.0	18.81	3.7	40.0
Personal service	8.87	3.3	26.9	8.73	4.4	27.2	9.29	4.8	26.2
1	6.70	7.3	20.4	6.01	1.9	20.9	7.67	12.9	19.9
2	7.00	3.6	25.9	6.41	4.8	25.4	8.89	7.1	27.8
3	7.76	2.5	29.2	7.57	3.0	29.7	8.56	4.8	27.6
4	10.55	7.5	32.4	10.77	9.4	31.6	10.00	8.4	34.6
5	14.84	12.0	28.4	15.82	15.5	27.8	11.76	6.8	30.3
6	12.17	5.0	38.8	11.71	4.8	38.4	_	_	-
7	13.64	16.2	33.2	13.23	17.6	32.3	_	_	-
8	14.90	14.5	39.2	_	-	-	_	_	-
Not able to be leveled	8.65	10.9	25.0	_	l _	ı _ l	_	_	I _

A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.
Each occupation for which data are collected in an establishment is evaluated based

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Occupational groups may include data for levels not shown separately.

on 10 factors, including knowledge, complexity, work environment, etc. Points are assigned based on the occupation's rank within each factor. The points are summed to determine the

overall level of the occupation. See the Technical Note for more information.

3 Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, and holidays; nonproduction bonuses; and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers,

In this census division, collection was conducted between October 1996 and May 1998. The average reference period was August 1997.
 The relative standard error (RSE) is the standard error expressed as a percent of the estimate. It can be used to calculate a "confidence interval" around a sample estimate. For more information about RSEs, see Technical Note.

Technical Note

The data in this report are based on the National Compensation Survey (NCS) conducted by the Bureau of Labor Statistics throughout the year. The surveys are locality-based and cover establishments in private industry and State and local governments. Bulletins are issued for individual localities when sufficient data meet publication standards. Agriculture, private households, and the Federal Government are excluded from the scope of the survey.

Survey scope. In the East North Central census division, the NCS studied 3,255 establishments with 50 or more workers, representing 61,600 establishments within the scope of the survey. (See table A.) The number of workers represented by the survey is shown in table B. For purposes of this survey an establishment is an economic unit that produces goods or services, a central administrative office, or an auxiliary unit providing support services to a company. For private industry, an establishment is usually at a single physical location. For State and local government, an establishment is defined as all locations of a government entity.

Sampling frame. The list of establishments from which the survey sample was selected (sampling frame) was developed from the State unemployment insurance reports. The reference month for the public sector is June 1994. Due to the volatility of industries within the private sector, sampling frames were developed using the most recent month of reference available at the time the sample was selected. The reference month for the private sector is March 1996. The sampling frame was reviewed prior to the survey and, when necessary, missing establishments were added, out-of-business and out-of-scope establishments were removed, and addresses, employment levels, industry classification, and other information were updated.

Sample design and data collection. The sample for this survey was selected using a three stage design. The first stage consists of the selection of areas. The nationwide NCS sample includes 149 metropolitan and nonmetropolitan areas that represent the Nation's 326 metropolitan statistical areas (as defined by the Office of Management and Budget) and the remaining portions of the 48 contiguous States. Metropolitan areas are designated Metropolitan Statistical Areas (MSA) or Consolidated Metropolitan Statistical Areas (CMSA), as defined in 1994 by the Office of Management and Budget. Nonmetropolitan areas are counties that do not fit the metropolitan area definition.

The NCS locality areas that contribute to the East North Central census division are:

Bloomington-Normal, IL MSA Bloomington, IN MSA Chicago-Gary-Kenosha, IL-IN-WI CMSA Cincinnati-Hamilton, OH-KY-IN CMSA Cleveland-Akron, OH CMSA Columbus, OH MSA Dayton-Springfield, OH MSA Delta County, MI Detroit-Ann Arbor-Flint, MI CMSA Elkhart-Goshen, IN MSA Fond du Lac County, WI Grand Rapids-Muskegon-Holland, MI MSA Green Lake County, WI Henderson County, IL Indianapolis, IN MSA Jefferson County, IN Juneau County, WI Kalamazoo-Battle Creek, MI MSA Marshall County, IN Milwaukee-Racine, WI CMSA Monroe County, OH Morgan County, IL Rockford, IL MSA Sauk County, WI Seneca County, OH Wayne County, OH Youngstown-Warren, OH MSA

In the second stage, the sample of establishments is drawn by first stratifying the sampling frame by industry and ownership. The number of sample establishments allocated to each stratum is approximately proportional to the stratum employment. Each sampled establishment is selected within a stratum with a probability proportional to its employment. Use of this technique means that the larger an establishment's employment, the greater its chance of selection. Weights are applied to each establishment when the data are tabulated so the establishment represents similar units (by industry and employment size) in the economy that are not selected for collection.

The third stage of sample selection is a probability sample of occupations within a sampled establishment. In the East North Central region, collection was conducted between October 1996 and May 1998 with an average reference period of August 1997. The combined average payroll reference month for all surveys that contributed to the national estimates is August 1997. Additional information about the area sample and method of estimation is available in the BLS pub-

¹ Establishments classified as employing between 50 and 99 workers may include establishments with fewer than 50 workers because staff reductions may have taken place between the time of sampling and the time of data collection.

lication, National Compensation Survey: Occupational Wages in the United States, 1997, Bulletin 2519.

Occupational selection and classification. Identification of the occupations for which wage data are collected is a four-step process:

- Probability-proportional-to-size selection of establishment jobs
- Classification of jobs into occupations based on the Census of Population system
- 3. Characterization of jobs as full time v. part time, union v. nonunion, and time v. incentive
- 4. Determination of the level of work of each job

For each occupation, wage data are collected for those workers who meet all the criteria identified in the last three steps. Special procedures are developed for jobs for which a correct classification or level cannot be determined.

In step one, the jobs to be sampled are selected at each establishment by the BLS field economist during a personal visit. A complete list of employees is used for sampling, with each selected worker representing a job within the establishment. As with the selection of establishments, the selection of a job is based on probability proportional to its size in the establishment. The greater the number of people working in a job in the establishment, the greater its chance of selection.

The second step of the process entails classifying the selected jobs into occupations based on their duties. The National Compensation Survey occupational classification system is based on the 1990 Census of Population. A selected job may fall into any one of about 480 occupational classifications, from accountant to wood lathe operator. In cases where a job's duties overlap two or more census classification codes, the duties used to set the wage level are used to classify the job. Classification by primary duties is the fallback.

In step three, certain other job characteristics of the chosen workers are identified. First, the worker is identified as holding either a full- or part-time job, based on the establishment's definition of those terms. Then the worker is classified as having a time versus incentive job, depending on whether any part of pay is directly based on the actual production of the workers, rather than solely on hours worked. Finally, the worker is identified as being in a union job or a nonunion job.

The fourth step in the job classification procedure is to determine the work level of each of the establishment's selected jobs, using a "generic leveling" process. This process, involving discussions between the Bureau's field economist and the respondent, ranks and compares all selected establishment occupations using 10 leveling factors. For more information on generic leveling and an example of using the criteria for leveling a job, see appendixes C and D at

www.bls.gov/compub.htm or any of our published NCS bulletins. This web site also has a link to the NCS job descriptions.

Data reliability. The data in this summary are estimates from a scientifically selected probability sample. There are two types of errors possible in an estimate based on a sample survey, sampling and nonsampling.

Sampling errors occur because observations come only from a sample and not from an entire population. The sample used for this survey is one of a number of possible samples of the same size that could have been selected using the sample design. Estimates derived from the different samples would differ from each other.

A measure of the variation among these differing estimates is called the standard error or sampling error. It indicates the precision with which an estimate from a particular sample approximates the average result of all possible samples. The relative standard error (RSE) is the standard error divided by the estimate. Tables in this report provide RSE data for indicated series.

The standard error can be used to calculate a "confidence interval" around a sample estimate. As an example, suppose the mean hourly earnings for all workers is \$15.09 per hour with a relative standard error of 0.6 percent for this estimate. At the 90-percent level, the confidence interval for this estimate is \$15.24 to \$14.94 (\$15.09 x $1.645 \times 0.006 = \$0.149$, round to \$0.15); (\$15.09 + .15 = \$15.24; \$15.09 - .15 = \$14.94). If all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time.

Nonsampling errors also affect survey results. They can stem from many sources, such as inability to obtain information for some establishments, difficulties with survey definitions, inability of the respondents to provide correct information, or mistakes in recording or coding the data obtained. A Technical Reinterview Program conducted in all survey areas will be used to develop a formal quality assessment process to help compute nonsampling error. Although they also are not specifically measured, efforts are made to minimize nonsampling errors by the extensive training of field economists who gather survey data, edit the data by computer, and provide a detailed review of the data.

Census area divisions. Census divisions providing data are defined as follows: New England—Connecticut, Massachusetts, New Hampshire, Maine, Vermont, and Rhode Island; Middle Atlantic—New Jersey, New York, and Pennsylvania; East North Central—Illinois, Indiana, Michigan, Ohio, and Wisconsin; West North Central—Iowa, Kansas, Minnesota, Missouri, North Dakota, South Dakota, and Nebraska; South Atlantic—Delaware, District of Columbia, Florida,

Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; **East South Central**—Alabama, Kentucky, Mississippi, and Tennessee; **West South Central**—Arkansas, Louisiana, Oklahoma, and Texas; **Mountain**—Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada; and **Pacific**—Washington, Oregon, California, Hawaii, and Alaska.² Some census divisions include Consolidated Metropolitan Statistical Areas (CMSAs) and Metropolitan Statistical Areas (MSAs) that cross State lines.

Additional information about the National Compensation Survey, including a list of occupational classifications, is available by calling (202) 691-6199. You may also write to the

Bureau of Labor Statistics at: Division of Compensation Data Analysis and Planning, 2 Massachusetts Ave., NE, Room 4175, Washington, DC 20212-0001, or send e-mail to **OCLTINFO@bls.gov**.

The data contained in this summary are also available on the Internet through the BLS site http://stats.bls.gov/comhome.htm. Data are in three formats: An ASCII file containing the published table formats; an ASCII file containing positional columns of data for manipulation as a data base or spreadsheet; and a Portable Document Format (PDF) containing the entire summary.

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² Although Alaska and Hawaii are included in the Pacific Census Division, the 1997 NCS excluded these States.

Table A. Number of establishments represented by the survey and number studied by industry group and establishment employment size, East North Central, National Compensation Survey, 1997

	Number of	Number of establishments studied							
Industry division	establish- ments rep- resented ¹	Total	50 - 99 workers	100 - 499 workers	500 - 999 workers	1000 - 2,499 workers	2,500 - 4,999 workers	5,000 or more workers	
All	61.600	3.255	851	1.425	438	341	138	62	
	56,100	2,764	801	1,423	325	263	111	31	
Private Industry	18,200	950	216	434	127	100	59	14	
Goods-producing industries	10,200	20	12	8	121	100	39	14	
Mining Construction	2.100	83	46	36		_	_	_	
	16,000	847	158	390		100	- 50		
Manufacturing	11,900	631	115	278	126 93	100 81	59 53	14 11	
Durable goods	11,900	031	115	2/8	93	01	53	''	
Fabricated metal products, except machinery and	1 000	107	24		44	4.5	_		
transportation equipment	1,900	107	21	55	11	15	5	_	
Industrial and commercial machinery and computer	2.900	407	26	65	24	_			
equipment Electronic and electrical equipment	2,900 1.300	137 60	36	26	21 14	9 7	6 3		
• •	,		10	30	18		33	7	
Transportation equipment	1,000 500	128 34	4	17	6	30 7	33	·	
Measuring, analyzing, and controlling instruments			1	1	33				
Nondurable goods	4,100 800	216 51	43 14	112	10	19 4	6	3	
Food and kindred products		-	1	-	_		_	_	
Printing, publishing, and allied industries	1,100	59	12	29	10	5	3		
Chemicals and allied products	800	41	9	17	6	6	1 50	2	
Service-producing industries	38,000	1,814	585	799	198	163	52	17	
Transportation and utilities	3,500	170	47	70	27	19	3	4	
Wholesale trade	3,300	105	40	53	8	4			
Retail trade	13,200	445	206	181	33	19	5	1 1	
Finance, insurance and real estate	2,700	158	38	55	33	15	10	7	
Depository institutions	1,200	58	15	19	12	3	5	4	
Insurance carriers	600	58	7	22	14	8	4	3	
Services	15,300	936	254	440	97	106	34	5	
Business services	3,600	182	50	91	24	16	1	_	
Educational services	900	153	61	68	14	8	2		
Health services	4,500	385	56	173	47	75	29	5	
Hospitals	700	187	3	40	36	74	29	5	
Engineering, accounting, research, management, and				l		_	_		
related services	900	44	18	17	4	3	2		
State and local government	5,400	491	50	192	113	78	27	31	
Health services	200	42	6	13	12	5	3	3	
Hospitals	100	24	1	4	9	4	3	3	

¹ Number of establishments represented by the survey rounded to the nearest 100.

NOTE: Dashes indicate that no data were reported. Overall industry and industry groups may include data for categories not shown separately.

 $\label{thm:control} \mbox{Table B. Number of workers1 represented by the survey, by occupational group,2 East North Central, National Compensation Survey,3 1997}$

Occupational group	All industries	Private industry	State and local government
All	12,243,100	9,982,000	2,261,100
	11,544,700	9,290,900	2,253,800
White collar	5,950,100	4,478,300	1,471,900
	5,251,700	3,787,100	1,464,600
Professional specialty and technical Professional specialty occupations Technical occupations Executive, administrative, and managerial Sales Administrative support, including clerical	2,292,500	1,403,600	888,800
	1,835,300	999,600	835,700
	457,200	404,100	53,100
	1,020,100	843,500	176,700
	698,400	691,100	7,300
	1,939,100	1,540,000	399,100
Blue collar Precision production, craft, and repair Machine operators, assemblers, and inspectors Transportation and material moving Handlers, equipment cleaners, helpers, and laborers	4,266,100	4,014,800	251,300
	1,032,300	941,300	91,000
	1,746,700	1,742,200	4,600
	532,100	435,000	97,100
	955,000	896,300	58,700
Service	2,026,900	1,489,000	537,900

Number of workers represented by the survey are rounded to the nearest 100. Estimates of the number of workers provide a description of size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels. Both full-time and part-time workers were included in the survey.

² A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. For more information, see Technical Note.

³ In this census division, collection was conducted between October 1996 and May 1998. The average reference period was August 1997.